IN THE

SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1967

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No. 360 and 361

BROTHERHOOD OF LOCOMOTIVE FIREMEN AND ENGINEMEN, BROTHERHOOD OF RAILROAD TRAINMEN, ORDER OF RAILWAY CONDUCTORS AND BRAKEMEN, and SWITCHMEN'S UNION OF NORTH AMERICA,

Intervenor-Appellants

and

ROBERT S. HARDIN, Prosecuting Attorney for the Second Judicial Circuit of Arkansas, and W. F. DENMAN, JR., Prosecuting Attorney for the Eighth Judicial Circuit of Arkansas,

Appellants

—v—

CHICAGO, ROCK ISLAND AND PACIFIC RAILROAD COMPANY, THE KANSAS CITY SOUTHERN RAILWAY COMPANY, MISSOURI PACIFIC RAILROAD COMPANY, ST. LOUIS-SAN FRANCISCO RAILWAY COMPANY, ST. LOUIS SOUTHWESTERN RAILWAY COMPANY, and THE TEXAS AND PACIFIC RAILWAY COMPANY,

Appellees

ON APPEAL FROM THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF ARKANSAS

BRIEF FOR APPELLEES

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SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1967

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BROTHERHOOD OF LOCOMOTIVE FIREMEN AND ENGINEMEN, BROTHERHOOD OF RAILROAD TRAINMEN, ORDER OF RAILWAY CONDUCTORS AND BRAKEMEN, and SWITCHMEN'S UNION OF NORTH AMERICA, *Intervenor-Appellants,*

and

ROBERT N. HARDIN, Prosecuting Attorney for the Seventh Judicial Circuit of Arkansas, and W. F. DENMAN, JR., Prosecuting Attorney for the Eighth Judicial Circuit of Arkansas, *Appellants,*

—v.—

CHICAGO, ROCK ISLAND AND PACIFIC RAILROAD COMPANY, THE KANSAS CITY SOUTHERN RAILWAY COMPANY, MISSOURI PACIFIC RAILROAD COMPANY, ST. LOUIS-SAN FRANCISCO RAILWAY COMPANY, ST. LOUIS SOUTHWESTERN RAILWAY COMPANY, and THE TEXAS AND PACIFIC RAILWAY COMPANY, *Appellees.*

ON APPEAL FROM THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF ARKANSAS

BRIEF FOR APPELLEES.

QUESTIONS PRESENTED.

The basic question presented by this appeal is whether the District Court erred in finding and concluding that

(1) pervading and fundamental changes in railroad technology, equipment, and operating practices since

the 1920s deprive the prior decisions involving the Arkansas crew consist statutes of controlling force or effect;

(2) "under present conditions continued enforcement of the statutes makes no significant contribution to railroad safety"; and

(3) "the statutes as they operate today are unreasonable and oppressive" in violation of the Due Process and Commerce Clauses of the United States Constitution.

Thus the issues here are primarily factual, not legal. Settled constitutional doctrine leaves little room for dispute about the validity of statutes, purportedly based on safety considerations, whose "continued enforcement makes no significant contribution to railroad safety," which impose "unreasonable and arbitrary requirements," and which are "functus officio as far as railroad safety is concerned" (274 F.Supp. at 303-05). This Court in fact settled the applicable legal principles when it rejected the Brotherhood's claim that these constitutional challenges raised by the carriers were insubstantial (*Brotherhood of Locomotive Engineers, et al. v. Chicago, R. I. & P. Co., et al.*, 382 U.S. 423 (1966)). Although this Court at that stage of the litigation was passing primarily on the legal adequacy of the pleadings, its decision is also controlling here since the findings of the District Court clearly support the basic allegations of the complaint.

STATEMENT.

This suit was filed by the six interstate railroads operating in and through the State of Arkansas for the purpose of seeking a determination that the 1907 and 1913 Arkansas statutes requiring crews of six employees in freight and yard service contravene the Due Process, Equal Protection and Commerce Clauses of the United States Constitution. It was also alleged that the statutes in question were in conflict with Public Law 88-108 (77 STAT. 132) and various awards rendered pursuant thereto and that the Federal legislation had thus preempted the field. Originally the defendants were two prosecuting attorneys of the State of Arkansas charged with the enforcement of the statutes and injunctive relief was sought to restrain the defendants from enforcing the laws in question. Shortly after the suit was instituted, the national labor organizations representing operating employees of the railroads were permitted to intervene. Following the denial of certain motions filed by the intervenors, the District Court, one judge dissenting, granted the carriers' motion for summary judgment based on the preemption point raised in the complaint. This Court reversed and held, one Justice dissenting, that Congress had not intended to supersede the Arkansas statutes when it enacted Public Law 88-108 and the other relevant legislation. *Brotherhood of Locomotive Engineers, et al. v. Chicago, Rock Island and Pacific R. Co., et al.*, 382 U.S. 423 (1966).

On the appeal to this Court the appellants contended, as they had in the District Court, that the constitutional questions raised by the complaint were so insubstantial as to defeat the jurisdiction of the three-judge court. Rejecting this contention, this Court held:

> "The complaint here, however, also challenged the Arkansas statutes as being in violation of the Com-

> merce, Due Process, and Equal Protection Clauses. In briefs submitted to us after oral argument the appellants have argued that all these constitutional challenges are so insubstantial as a matter of law that they are insufficient to make this an appropriate case for a three-judge court. We cannot accept that argument. Whatever the ultimate holdings on the questions may be we cannot dismiss them as insubstantial on their face" (p. 428).

The case was remanded to the lower court "* * * for consideration of the constitutional issues left undecided by its previous judgment" (382 U.S. 423, 438).

On remand, the parties agreed to certain expediting procedures which permitted the compilation of a complete and extensive record with a minimum number of trial days. The record contains the testimony of over 100 witnesses plus many exhibits and various public reports and documents. Although the record is necessarily massive, the three-judge District Court recognized that the issues it was to decide were largely factual and elected to hear them first-hand. Thus, the Court did not follow the example of *Norwood* (13 F. Supp. 24) by appointing a special master.

The State of Arkansas made only a minimum presentation, explaining its evidentiary showing as follows:

> "In the course of preparing evidence to be submitted during the trial, defendants did not solicit testimony to the conclusion that the minimum crews established by the Arkansas Statutes enhance the safe operation of railroad transportation. The task of sustaining the validity of the statutes was left to the intervening Railroad Brotherhoods" (Post-Trial Brief for Defendants, pp. 2-3).

Not all of the "intervening Railroad Brotherhoods" undertook the task of sustaining the statutes in question.

Although the Brotherhood of Locomotive Engineers, the Order of Railway Conductors, and the Switchmen's Union of North America joined in the Motion to Intervene, these organizations did not call any witnesses to support the statutory requirements. The witnesses who were called were members instead of the labor organizations representing firemen and brakemen. Since conductors and engineers are the senior members of the crews operating trains in freight and yard service, and would continue as members of such crews in the absence of the statutory requirements, the silence of the organizations representing such employees is difficult to understand if the statutes in question make any contribution to safety of operations.[1] The organizations representing firemen and brakemen (the unnecessary and dispensable crew members under the decision of the lower court) did call a number of witnesses, primarily for the purpose of eliciting opinion testimony.

The case was fully litigated, argued and briefed and was decided by the District Court after being under advisement for several months. The decision of the lower court was unanimous and deals clearly and most directly with the issues raised by the pleadings. The extensive proof which was analyzed and discussed by the District Court related primarily to the changes in railroad technology, equipment and operations which had occurred since the prior decisions by this Court in the early 1900s and the further issue as to whether the statutes in ques-

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[1] Other evidence shows that the Brotherhood of Locomotive Engineers has concluded, on the basis of experience with operations conducted without firemen under the Award of Arbitration Board No. 282, that firemen are redundant and that an engine crew of two employees (engineer and brakeman) is entirely safe and adequate (PX 79, p. 19; A. 506-08). Furthermore, the Brotherhood of Locomotive Engineers concedes the correctness of the judgment of the District Court and has declined to join in this appeal (see Letter of Counsel for Appellants to Honorable John F. Davis, dated October 30, 1967).

tion, considered in the context of current railroad operations, bear any relationship to the safety of such operations. With respect to this latter issue the District Court found:

> "Conceding that as late as the Norwood decision the question of the reasonableness of the Arkansas full crew laws was 'fairly debatable,' we are convinced with the requisite degree of certainty that the question is not fairly debatable today, and it is not made so by the fact that the Brotherhoods continue to debate it.
>
> "We find from the evidence as a whole that under present conditions continued enforcement of the statutes makes no significant contributions to railroad safety, and that the statutes as they operate today are unreasonable and oppressive, and that they violate the Due Process Clause and unconstitutionally burden interstate commerce" (274 F.Supp. at 303).

The *Norwood* decision to which the District Court referred was the last of a series of three decisions dealing with the validity of the Arkansas Statutes enacted in 1907 and 1913. A careful examination of these laws and their history is illuminating.

Arkansas Act No. 116 of 1907 (A. 25) relates to freight trains and provides, with certain exceptions, that no freight train may have a crew "consisting of less than an engineer, a fireman, a conductor, and three (3) brakemen, regardless of any modern equipment * * *." The exceptions are for railroad companies whose lines are less than fifty miles in length, and for trains of less than twenty-five cars.

Arkansas Act No. 67 of 1913 (A. 26) relates to switch crews operating in cities of the first and second class where switching is done "across public crossings within the city limits." This Act provides, with one exception,

that each such crew must consist of "one (1) engineer, a fireman, a foreman, and three (3) helpers." In Arkansas, cities of the first class are those with over 2500 inhabitants, and cities of the second class are those with at least 500 but not more than 2500 inhabitants. Ark. Stats. 19-202. However, the citizens of any incorporated town can vote to become a city of the second class without restriction as to population. Ark. Stats. 19-215. Therefore the Act applies to the vast majority of the switching operations conducted by appellees in Arkansas over public crossings notwithstanding the apparent geographic limitation. The exception is for companies "operating railroads less than one hundred (100) miles in length."

The number of states with similar legislation that effectively regulates the size of train crews has been rapidly dwindling (PX 109, p. 19; A. 234, 993).[1] Only Indiana still requires as many as six men on a freight crew[2] along with Arkansas, and while Ohio[3] and Indiana require a five man switch crew, no state other than Arkansas fixes the switch crew size as high as six men. If any other state has ever required as many as six men on a switch crew, counsel have been unable to locate such legislation. Thus it is apparent that the only places in the United States where railroad freight trains are run with crews consisting of as many as six men are Indiana and Arkansas, and the only place where switching operations at any time have been consistently conducted with six-man crews is Arkansas.

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[1] Exhibit references herein are as follows:

PX: Plaintiffs' Exhibit.
IRX: Intervenors' Rebuttal Exhibit.
DX: Defendants' Exhibit.
IX: Intervenors' Exhibit.
PRX: Plaintiffs' Rebuttal Exhibit.

[2] Indiana Acts of 1937, ch. 58, §§ 1-13.

[3] §§ 4999.07 and 4999.08, Ohio Revised Code.

That the Arkansas laws traditionally have been the most burdensome in the nation no doubt accounts for the repeated occasions they have commanded the attention of this Court. Between 1911 and 1966 the validity of these laws has been challenged here on five separate appeals.

The constitutionality of the 1907 Act was promptly challenged on the ground that it was repugnant to the equal protection clause of the Fourteenth Amendment to the United States Constitution and the privileges and immunities provisions of the Arkansas Constitution. It was also urged that it constituted a regulation of commerce in a field belonging exclusively to Congress, and that it constituted an arbitrary and unreasonable burden on interstate commerce. The Supreme Court of Arkansas sustained the constitutionality of the Act, but in so doing found it necessary to construe its provisions as excluding branch lines less than fifty miles in length belonging to companies which owned other lines exceeding fifty miles in length. Otherwise, the Court concluded, application of the Act to such branch lines but not to similar independently owned lines shorter than fifty miles "would be plainly unconstitutional under the authorities heretofore reviewed." This was because the classification would then rest on ownership alone, and ownership does not bear any reasonable relationship to the purported purpose of the Act which was safety. *Chicago, Rock Island & Pacific Ry. Co. v. State,* 86 Ark. 412, 111 S. W. 456 (1908).

This Court affirmed in *Chicago, R. I. & P. Ry. Co. v. State of Arkansas,* 219 U. S. 453, 55 L. Ed. 290, 31 S. Ct. 275 (1911), referring to the principle announced in *Gibbons v. Ogden,* 9 Wheat. 1, 211, 6 L. Ed. 23, 73, that the grant to Congress of the power to regulate commerce did not impair "the authority of the states to establish *reasonable* regulations for the protection of the health, the lives, or the safety of their people * * *" (emphasis supplied).

The Court noted that "under the evidence, there is admittedly some room for controversy as to whether the statute is or was necessary; but it cannot be said that it is so unreasonable as to justify the court in adjudging that it is merely an arbitrary exercise of power, and not germane to the objects which evidently the state legislature had in view." The evidence referred to dealt with the automatic couplers and air brakes then in use which, the railroad contended, made the third brakeman unnecessary because there were no duties connected with the operation of the train to be performed by him. This evidence was heard, and the line between arbitrary exercise of power and a reasonable relation of the Act to its purported purpose was drawn by this Court, in light of railroad technology and operating practices prevailing in the first decade of the twentieth century.

The switch crew law was passed in 1913 and was attacked in *St. Louis, I. M. & S. Ry. Co. v. State,* 114 Ark. 486, 170 S. W. 580 (1914). The Supreme Court of Arkansas sustained the Act against contentions of unconstitutionality based on (1) unjust classification, (2) arbitrary and unreasonable exercise of power, (3) interference with interstate commerce, and (4) excessive penal provisions. The Court relied on the authority of its own decision upholding the freight crew law, and the decision of this Court in that case, saying that "every point raised (in this case) is decided adversely * * *" to the contentions of the railroad in those two decisions. While not discussing the testimony in detail, the Court indicated that the factual development of the case was concerned with whether the additional "helper" was reasonably necessary. It pointed out that there was testimony "that there was absolutely no reason for requiring more than five men in the switch crew, and that switching could be more speedily and safely done with five men than with six". Other testimony was to the effect that "it is necessary, in

order to give proper protection at crossings, to have the additional man". The Court, apparently less than enthusiastic about the reasonableness of the Act, concluded:

> "It is unnecessary for a statement of the conclusions as to the validity of the law to state where the preponderance of the testimony lies, it being sufficient to say that it fails to show that the Legislature had no grounds for adopting this requirement and enacting it into a statute. There appears to be some grounds for requiring the extra man in the crew to protect the public at crossings, and the requirement is not arbitrary; therefore it is our duty to accept the determination of the lawmakers as to the policy and expediency of the statute."

This decision was affirmed in *St. Louis, Iron Mountain, & Southern Railway Company v. State of Arkansas,* 240 U. S. 518, 60 L. Ed. 776, 36 S. Ct. 443 (1916). The opinion is brief, and the prior decision upholding the freight crew law is the authority upon which the switch crew law was sustained. In answer to the contention that there is a distinction between the two laws, the court considered the distinction to be one of degree only saying that "the basis of both is safety to the public, though the urgency in one may not be as great as the urgency of the other".

This theme of "safety to the public" is recurrent throughout the decisions considering these laws, and the Supreme Court of Arkansas has indicated that this is the only basis upon which they can be sustained. Thus in *Chicago, R. I. & P. R. Co. v. State,* supra, the Court stated:

> "This legislation can only be supported on account of its supposed promotion of the safety of the public and the employees of a public service corporation, and a distinction based on ownership is wholly untenable." (86 Ark. 412 at 431.)

Indeed, the courts had made it so clear that these laws must stand or fall on the basis of their reasonable relationship to the promotion of safety that by the time the 1913 Act was adopted its draftsmen deemed it necessary to entitle it "AN ACT for the better protection and safety of the public".

The validity of the freight crew law (1907 Act) and the switch crew law (1913 Act) was again the subject of challenge in *Missouri Pac. R. Co. v. Norwood,* 42 F. 2d 765, D. C., W. D. Ark. (1930). There the railroad company brought suit to enjoin the enforcement of these laws as violative of the equal protection and due process clauses of the Fourteenth Amendment to the United States Constitution and further because Congress had occupied this field of regulation by the Interstate Commerce Act and the Railway Labor Act. A statutory three-judge district court dismissed the complaint for failure to state a cause of action. In so doing the court considered the constitutional question settled by the prior decisions of this Court with regard to these laws, and the district court found that Congress had not pre-empted the field.

The decision was affirmed by this Court because "* * * the facts alleged are not sufficient to distinguish this case from those in which this court has sustained these laws". *Missouri P. R. Co. v. Norwood,* 283 U. S. 249, 75 L. Ed. 1010, 51 S. Ct. 458 (1931). The decision was influenced to a great extent by the extremely limited record available for this Court's consideration when the case arrived here. There was apparently no testimony or exhibits. The opinion lists the pertinent questions which were unanswered by the record:

> "There is no showing that the dangers against which these laws were intended to safeguard employees and the public no longer exist or have been lessened by the improvements in road and equipment

> or by the changes in operating conditions there described. * * * It is not made to appear that the expense of complying with the state laws is now relatively more burdensome than formerly. * * * There is no statement as to present efficiency of switching crews compared with that when the 1913 Act was passed * * *. While cost of complying with state laws enacted to promote safety is an element properly to be taken into account in determining whether such laws are arbitrary and repugnant to the due process clause of the 14th Amendment (citing cases), there is nothing alleged in that respect which is sufficient to distinguish this case from those in which we have upheld the laws in question" (p. 255).

This Court concluded that if circumstances had changed sufficiently since it had last considered these laws to make them arbitrary and unreasonable in their operation and effect then such change of circumstances was not adequately demonstrated in the limited record before it. This Court also held, as did the District Court, that Congress had not manifested an intent to occupy the field of regulating the number of crew members on trains.

On motion of the plaintiff, the mandate of this Court was modified to an affirmance "without prejudice to any application to the District Court to amend the pleadings or otherwise". 283 U. S. 809, 51 S. Ct. 652, 75 L. Ed. 1428. Under this modification, the plaintiff filed an amended petition in the District Court which, commenting that this Court's opinion "clearly suggested the issue which plaintiff would have to meet to overthrow the laws because of the Fourteenth Amendment", defined the question before it as follows:

> "Broadly, this issue was whether there had been such a change in the situations to which the laws applied as to render their application to the new con-

ditions clearly arbitrary and unreasonable." (*Missouri Pac. R. Co. v. Norwood,* 13 F.Supp. 24 (1933).)

The Court referred the case to a special master for the taking of evidence. Based on his voluminous report it found that while conditions had changed since the enactment of the 1907 and 1913 Acts, the cost of complying with the Acts had not been so increased nor had the dangers at which the Acts were directed been so reduced as to make the requirements of the Acts "clearly unreasonable and arbitrary". This opinion contains an extensive recitation of comparative conditions of the operations of Missouri Pacific Railroad Company and its predecessor in the 1907-1913 period and the period of the late 1920's and early 1930's. The decision was affirmed in a memorandum order appearing at 290 U.S. 600, 78 L. Ed. 527, 54 S. Ct. 227 (1933), as follows:

> "December 11, 1933. Per Curiam: The Court sees no reason to disagree with the determinations of fact reached by the District Court. The decree is affirmed."

The proof in the case at bar shows a dramatic change from the conditions of railroad operations confronting the *Norwood* court. This case significantly differs from the earlier suits testing these Arkansas laws in other respects. In each of the earlier cases the railroad sought to show that the statute required an unneeded man—either a brakeman or a switch helper. It was acknowledged that five men were needed to operate most trains, and was certainly conceded that a fireman was needed to tend the locomotive fire.

The present challenge to these laws is much broader. Appellees contend, and the evidence demonstrates, that these antediluvian statutes now require the employment of at least two extra men in train crews and that a maximum crew of four men is adequate for the safe operation

of freight and switch crews. That contention does not rest merely on theory and opinion in this record, as does the claim to the contrary. The actual operation of crews of four men since May, 1964, everywhere in the United States except those few states with crew consist laws, and the relative safety of those operations, afford a concrete basis for a finding that a six man crew requirement is demonstrably unreasonable and arbitrary under present conditions. In the earlier cases the dubious benefit to be obtained from requiring an extra man in the crew during steam locomotive operations was enough for the courts to conclude that the statutes were not clearly arbitrary. This is hardly precedent to support the statutory requirement of at least two extra men on train crews in the diesel era.

The most recent decision of the Supreme Court of Arkansas dealing with crew consist laws that is relevant to the issues here is *Johnson v. Hall,* 229 Ark. 400, 316 S. W. 2d 194 (1958), which was an original action in that Court to test the sufficiency of a ballot title of a proposed constitutional amendment. The proposed amendment would have placed the provisions of these Acts in the Arkansas Constitution with certain changes in their content including a reduction of the three-car provision in the 1909 Act to two cars, a reduction of the twenty-five car provision in the 1907 Act to twenty cars, and changing the requirement of the 1907 Act of three brakemen to two brakemen and a flagman. The proposed ballot title was "An Amendment Prohibiting Operation of Trains With Unsafe and Inadequate Crews," and the Court unanimously held the title to contain partisan coloring and that it was therefore insufficient. In so holding, the Court refused to accept as an established fact that crews of lesser number than provided in the Acts and the proposed amendment were inadequate saying of the adequacy of a train crew "Actually, this is

a fact question, depending upon the circumstances in each case."

Of course, the inflexibility of the requirements of the statutes do not permit fixing the size of crews consistent with the requirements and circumstances "in each case". It would appear that the parties agree that the size of a crew to perform its work safely varies with the circumstances. Many of the intervenor's witnesses conceded this (PRX 5, p. 28; PRX 6, p. 13; PRX 30, p. 15; PRX 32, p. 26; PRX 34, pp. 50-51). The awards of the Special Boards of Adjustment reflect it (PX 21, PX 80). Collective bargaining agreements between the railroads and the intervenors recognize it (PX 19, p. 54). Even Mr. Youngdahl, attorney for appellee Brotherhoods, concurred when he said in his opening statement at the trial "We do not contend that the full-crew law(s) in question are always necessary" (T. 15).

In the face of the undisputed fact that safe crew requirements vary with the circumstances of the operation, the inflexibility of the size of crews fixed by the statutes is persuasive evidence, standing alone, of the unreasonable and arbitrary character of this legislation.

SUMMARY OF ARGUMENT.

The judgment of the District Court, based on its conclusion that crew requirements imposed by the Arkansas statutes are unreasonable, oppressive, and unduly burden interstate commerce, correctly applies the controlling precedents established by this Court and is in accord with the overwhelming weight of the evidence. The re-examination of the Arkansas statutes, in the light of fully documented changes in railroad technology and operations, is clearly proper under *Nashville C. & St. L. Ry. Co. v. Walters,* 294 U.S. 405 (1935).

The District Court emphasized that the Arkansas statutes "are presumed to be valid," that "the burden is upon plaintiffs to establish the invalidity of the statutes and if upon a consideration of the whole record a reasonable doubt upon the question remains, that doubt must be resolved in favor of the validity of the statutes" (274 F.Supp. 300). Obviously, the District Court indulged every reasonable presumption in favor of the statutes and found them to be invalid only on the basis of overwhelming evidence establishing their oppressiveness and utter unreasonableness.

With respect to the crucial issue of the relationship, if any, between the Arkansas crew size requirements and safety of operations, the evidence in fact compelled the findings of the District Court that the statutes make no significant contribution to safety of operations. There is extensive and persuasive evidence of the complete obsolescence of the jobs of firemen and third brakemen as technological and related changes since the early 1930s have revolutionized the road and yard operations of American railroads.[1] In terms of the conditions consid-

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[1] The Presidential Railroad Commission referred to these circumstances in the initial portion of its report, stating:

"This Commission was generated out of a recognition by both labor and management in the railroad industry that basic

ered by the courts in prior decisions involving the Arkansas statutes, these documented changes have eliminated all of the factors upon which the courts relied in upholding the statutes as safety related legislation.

The absence of any existing relationship between the 6 man crews required in Arkansas and safety of operations is most conclusively established by evidence of safe operations in other states with smaller crews. Statistical and other proof on this issue clearly establishes the correctness of the District Court's findings that operations with smaller crews in other states are conducted with complete safety. There have also been, in recent years, repeated determinations by public agencies in the area of proper and safe manning practices in the railroad industry. These public agencies, without exception, have concluded that at least two of the crew members required by the Arkansas statutes are not necessary for safety of operations. In each instance, the labor organization which have intervened here were participants before the Boards and Commissions in question and presented to those agencies the same claims as to proper crew size as were presented to the District Court.

As the District Court found, the labor organizations representing railroad employees have also recognized the redundancy of crew members required by the Arkansas statutes. The Brotherhood of Locomotive Engineers is clearly on record in this respect and the other unions, by virtue of contract proposals and agreements actually made, have also recognized the complete adequacy and safety of smaller crews. Accordingly, the finding that the 6 man crews required by the Arkansas statutes are not reasonably related to safety of operations is unimpeachable.

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and even revolutionary changes have occurred in the industry over the past 40 years" (PX 19, pp. 4-5).

It follows inescapably that the cost of employing these redundant crew members (7 million dollars annually) is an undue burden on interstate commerce. Equally burdensome is the ritual required by these statutes when trains enter or leave Arkansas. The stops which must be made to increase the crew size as the train enters Arkansas and to reduce the crew as the train leaves the state interfere with and impede operations without any countervailing benefits. There is present in this case, therefore, a classic example of an unreasonable burden on interstate commerce.

Decisions by other courts with respect to crew consist legislation are in accord with the reasoning and rational of the District Court in the present case. In other jurisdictions, ordinances regulating the size of local transit crews have been invalidated on grounds similar to those relied on by the lower court. State legislation, fixing crew sizes for railroad freight and yard service, was found to be unconstitutional in Pennsylvania and in Wisconsin. In other states (Nebraska, Texas and Nevada) the courts have concluded that the legislature could not have intended to require firemen on diesel locomotives since they have no functions to perform on such equipment, thus effectively nullifying the statutes. In New York, the trial court's judgment finding the crew size statute to be valid is now on appeal. The Court of Appeals divided evenly after hearing argument and re-argument has been ordered. On balance, therefore, the decision of the District Court in the present case is in accord with the clear preponderance of authority.

The statutes in question also discriminate against interstate commerce and violate the Equal Protection Clause of the Constitution. The statutes, in effect, exempt all intrastate railroads in Arkansas and restrict their application to interstate carriers. The statutes are directed against

interstate commerce alone and achieve this result by a wholly irrational classification. It is also well settled that the Equal Protection Clause requires that statutory classification be based on differences that are reasonably related to the statutory purpose. There is no proof in the record tending to support the fifty and one hundred mile classifications on the basis of safety considerations. There is instead affirmative proof that the exempt intrastate operations are comparable in many respects to the covered interstate operations. Accordingly, the statutes offend against the Equal Protection Clause.

I. THE DISTRICT COURT, IN CONCLUDING THAT THE ARKANSAS CREW REQUIREMENTS "ARE UNREASONABLE AND OPPRESSIVE AND THAT THEY VIOLATE THE DUE PROCESS CLAUSE AND UNCONSTITUTIONALLY BURDEN INTERSTATE COMMERCE," CORRECTLY APPLIED THE CONTROLLING PRECEDENTS OF THIS COURT AND ITS FACTUAL FINDINGS ARE OVERWHELMINGLY SUPPORTED BY THE EVIDENCE.

A. Applicable Constitutional Principles.

Due Process.

The District Court approached the question of the applicable legal guidelines by noting that "the governing legal principles are clear and, indeed, are not substantially disputed." Referring first to the due process issue, the Court stated:

> "As far as the Due Process Clause is concerned, the statutes are not unconstitutional if their requirements are reasonably related to safety of operations, and if they are not unduly oppressive, restrictive, or costly in comparison with the safety benefits achieved. See, in addition to the cases involving the Arkansas statutes: *Goldblatt v. Town of Hempstead,* 369 U.S. 590, 594-595; *Lawton v. Steele,* 152 U.S. 133, 137; *Weinberg v. Northern Pacific Ry Co.,* 8 Cir., 150 F.2d 645.

> "If the reasonableness of the requirements of the statutes remains fairly debatable, this Court will not substitute its views for those of the Legislature; we do not sit to exercise 'legislative judgment.' *United States v. Carolene Products Co.*, 304 U.S. 144; *South Carolina State Highway Commission v. Barnwell Brothers, Inc.*, 303 U.S. 177; *Standard Oil Co. v. City of Marysville*, 279 U.S. 582; *Weinberg v. Northern Pacific R. Co.*; supra" (274 F.Supp. at 299).

In *Goldblatt v. Town of Hempstead*, 369 U.S. 590 (1962), cited by the District Court, the validity of an ordinance prohibiting defendants from operating a sand and gravel pit unless they had obtained a permit was questioned. This Court expressed the due process test in this language:

> "The question, therefore, narrows to whether the prohibition of further excavation below the water table is a valid exercise of the town's police power. The term 'police power' connotes the time-tested conceptional limit of public encroachment upon private interests. Except for the substitution of the familiar standard of 'reasonableness', this Court has generally refrained from announcing any specific criteria. The classic statement of the rule in *Lawton v. Steele*, 152 U.S. 133, 137, 14 S. Ct. 499, 501, 38 L. Ed. 385 (1894), is still valid today:
>
> " 'To justify the state in * * * interposing its authority in behalf of the public, it must appear—First, that the interests of the public * * * require such interference; and, second, that the means are reasonably necessary for the accomplishment of the purpose and not unduly oppressive upon individuals.' "

The case of *Lawton v. Steele*, 152 U.S. 133 (1894), referred to by the Court in *Goldblatt*, as "still valid today" involved a state statute providing that any fish nets,

panels or other devices used in violation of law shall constitute public nuisances. This Court said (152 U.S. 137):

> "* * * To justify the state in thus interposing its authority in behalf of the public, it must appear—First, that the interests of the public, generally, as distinguished from those of a particular class, require such interference; and, second, that the means are reasonably necessary for the accomplishment of the purpose, and not unduly oppressive upon individuals. The legislature may not, under the guise of protecting the public interests, arbitrarily interfere with private business, or impose unusual and unnecessary restrictions upon lawful occupations; in other words, its determination as to what is a proper exercise of its police powers is not final or conclusive, but is subject to the supervision of the courts. * * *"

Perhaps the basic test is most clearly indicated by this Court's description in *Goldblatt* of the evidence which would be relevant to this inquiry:

> "The ordinance in question was passed as a safety measure, and the town is attempting to uphold it on that basis. To evaluate its reasonableness we therefore need to know such things as the nature of the menace against which it will protect, the availability and effectiveness of other less drastic protective steps, and the loss which appellants will suffer from the imposition of the ordinance" (369 U.S. at 595).

Thus there is no conclusive presumption that the legislative determination was reasonable. In view of the challenge on due process grounds, the District Court correctly perceived its responsibility to test the reasonableness of the statutory requirements by reference to evidence that shows the burden imposed by the statutes and the absence

of any relationship between the requirements of the statutes and safety of railroad operations.

The District Court was also confronted with the question of the weight to be accorded the prior decisions involving the Arkansas crew consist statutes. After a careful consideration of the conflicting arguments on this point, the Court concluded as follows:

> "While we consider the issues against the backdrop of the former cases, we must consider them in the light of present day conditions and in the light of the additional experience with and insights into crew consists in relation to safety of operations which have been gained in the thirty four years which have elapsed since *Norwood* was finally decided" (274 F. Supp. at 298).

This approach, we submit, is eminently correct.

The *Norwood* case itself is ample authority for the proposition that a statute that is valid at one time can become unconstitutional because of the changed circumstances upon which it operates. The leading case on this point is *Nashville, C. & St. L. Ry. v. Walters,* 294 U.S. 405 (1935), where this Court reversed a decision of the Supreme Court of Tennessee which had refused to consider changed conditions on the matter of the validity of a statutory assessment for highways against the railroad. The Court said:

> "The Supreme Court declined to consider the special facts relied upon as showing that the order, and the statute as applied, were arbitrary and unreasonable; and did not pass upon the question whether the evidence sustained those findings. It held that the statute was, upon its face, constitutional; that when it was passed the state had, in the exercise of its police power, authority to impose upon railroads one-half of

the cost of eliminating existing or future grade crossings; and that the court could not 'any more' consider 'whether the provisions of the act in question have been rendered burdensome or unreasonable by changed economic and transportation conditions,' than it 'could consider changed mental attitudes to determine the constitutionality or enforceability of a statute.' *A rule to the contrary is settled by the decisions of this Court. A statute valid as to one set of facts may be invalid as to another. A statute valid when enacted may become invalid by change in the conditions to which it is applied.* The police power is subject to the constitutional limitation that it may not be exerted arbitrarily or unreasonably. * * *'" (Emphasis added.)

Undue Burden on Interstate Commerce.

On the question of burden on interstate commerce, the District Court stated the relevant principles as follows:

"As to the Commerce Clause, it goes without saying that Arkansas may not lawfully discriminate against interstate commerce, nor may the State unreasonably burden that commerce. With respect to the burdening of interstate commerce it should be pointed out that the Commerce Clause and the Due Process Clause are not exactly co-extensive. A State regulatory statute which may survive a due process attack may fall before the Commerce Clause. Bibb v. Navajo Freight Lines, 359 U.S. 520, 529.

"In the absence of ruling federal legislation or regulatory action, a State is free to adopt local safety legislation which may affect interstate commerce, provided that the enactment serves a real and legitimate purpose and is not unduly burdensome on that commerce. But, the general rule is that State regulation which interferes with the free flow of interstate commerce or which materially affects it in areas

where uniformity of regulation is required, is invalid under the Commerce Clause. Morgan v. Virginia, 328 U.S. 373; Southern Pacific Co. v. Arizona, 325 U.S. 761.

"At times, a State safety statute may have a distinct impact on interstate commerce, and when such a situation arises, there must be a judicial balancing of the legitimate State interest against the national interest in the flow of interstate commerce free from local regulation. Bibb v. Navajo Freight Lines, supra; Southern Pacific Co. v. Arizona, supra" (274 F.Supp. 300).

As the quoted language indicates, the District Court relied heavily on prior decisions by this Court. In one of the cited cases, *Southern Pacific Co. v. Arizona,* 235 U.S. 761 (1945), Chief Justice Stone defined the constitutional issue as follows:

"Hence the matters for ultimate determination here are the nature and extent of the burden which the state regulation of interstate trains, adopted as a safety measure, imposes on interstate commerce, and whether the relative weights of the state and national interests involved are such as to make inapplicable the rule, generally observed, that the free flow of interstate commerce and its freedom from local restraints in matters requiring uniformity of regulation are interests safeguarded by the commerce clause from state interference" (pp. 770-71).

In holding that the statutes materially impeded the free flow of interstate commerce, constituted a substantial obstruction to the national policy proclaimed by Congress to promote adequate, economical and efficient railway transportation service, and that the state interest was thus outweighed by the national interest, this Court considered the following matters in evidence as relevant to determination of the constitutional question:

(1) The practice of the railroad industry of the nation with regard to operating trains in excess of the limits imposed by the statutes in question.

(2) The cost to the two railroads traversing Arizona of complying with the statutes.

(3) The effect of statutes of other states then regulating the same subject, and the effect of such regulations if other states should in the future undertake to regulate the subject.[1]

(4) The judicial finding of fact (in opposition to those purportedly or presumably found by the legislature in connection with the enactment of the statutes) that the laws when viewed as safety measures afforded "at most slight and dubious advantage, if any, over unregulated train lengths."

(5) Comparative accident figures showing experience in states where the subject matter is not regulated.

This Court, in testing the relationship between the purported purpose of safety, and the actual effect of the statutes, defined the test as follows:

"The decisive question is whether in the circumstances the total effect of the law as a safety measure in reducing accidents and casualties is so slight or

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[1] This Court has again recognized the relevance of the cumulative burden of similar regulation (both existing and potential) by other states and their political subdivisions in measuring the extent to which the regulation actually does or could burden interstate commerce as recently as *Hess v. Illinois,* 385 U.S. 809 (1967). The Court there observed: "And if the power of Illinois to impose use tax burdens upon National were upheld, the resulting impediments upon the free conduct of its interstate business would be neither imaginary nor remote. For if Illinois can impose such burdens, so can every other State, and so, indeed, can every municipality, every school district, and every other political subdivision throughout the Nation with power to impose sales and use taxes."

> problematical as not to outweigh the national interest in keeping interstate commerce free from interferences which seriously impede it and subject it to local regulation which does not have a uniform effect on the interstate train journey which it interrupts'' (pp. 775-76).

The cases dealing with the validity of "full crew" laws were distinguished on the basis that the Court had considered their restrictions to be "a minimal burden on the commerce" compared to other subjects of state regulation which had been struck down under the Commerce Clause. Of course, the facts upon which the full crew laws were considered to be a "minimal burden" on commerce are substantially changed in many respects including relative cost of compliance, experience with their effectiveness as safety measures, and their unequal application to interstate and intrastate commerce. It is significant to note that the annual cost of complying with the Arizona statutes was about $1,000,000 to the two railroads traversing that State, compared with the annual cost of approximately $7,600,000 to appellees of compliance with the Arkansas Statutes.

In *Morgan v. Commonwealth of Virginia,* 328 U.S. 373 (1946), also relied upon by the District Court, this Court defined the test of constitutionality of state regulation of interstate commerce as follows:

> "The precise degree of a permissible restriction on state power cannot be fixed generally or indeed not even for one kind of state legislation, such as taxation or health or safety. There is a recognized abstract principle, however, that may be taken as a postulate for testing whether particular state legislation in the absence of action by Congress is beyond state power. This is that the state legislation is invalid if it unduly burdens that commerce in matters where uniformity is

necessary—necessary in the constitutional sense of useful in accomplishing a permitted purpose. Where uniformity is essential for the functioning of commerce, a state may not interpose its local regulation" (p. 377).

In defining a "burden on commerce" this Court said:

"Burdens upon commerce are those actions of a state which directly 'impair the usefulness of its facilities for such traffic.' That impairment, we think, may arise from other causes than cost or long delays. A burden may arise from a state statute which requires interstate passengers to order their movements on the vehicle in accordance with local rather than national requirements" (p. 380).

With regard to the relevance of other laws to show cumulative burdens, this Court said:

"To appraise the weight of the burden of the Virginia statute on interstate commerce, related statutes of other states are important to show whether there are cumulative effects which may make local regulation impracticable"[1] (pp. 381-82).

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[1] When crew consist legislation was accorded wider favor in this country, there was an absurd lack of uniformity with regard to the size of the crews prescribed as well as the circumstances to which the laws applied. In these declining days of this sort of "make-work" legislation, only Arkansas, Wisconsin, Ohio, Indiana and New York impose requirements of extra employees that effectively and substantially burden commerce. In these circumstances, a corollary necessarily emerges to the rule that legislation in other states is relevant in weighing the impact of these laws on interstate commerce. It is that the absence of such legislation is also relevant. No state adjacent to Arkansas still has such laws. Thus every train coming into this state meeting the standards of the Arkansas statutes will have a smaller crew than prescribed by them and therefore must be stopped or slowed to take on extra employees. The details of these ridiculous rituals at or near the Arkansas state line are later discussed herein.

There were ten states requiring segregation on motor carriers and eighteen prohibiting it. This Court concluded:

> "As there is no federal act dealing with the separation of races in interstate transportation, we must decide the validity of this Virginia statute on the challenge that it interferes with commerce, as a matter of balance between the exercise of the local police power and the need for national uniformity in the regulations for interstate travel. It seems clear to us that seating arrangements for the different races in interstate motor travel require a single, uniform rule to promote and protect national travel. Consequently we hold the Virginia statute in controversy invalid" (p. 386).

Logic, in light of present prevailing train operations involving rapid movement of trains through many states on single runs, would seem to render the requirement of additional crew members a much greater burden on commerce than regulation of passenger seating arrangements. Passengers could be reseated without the necessity of stopping or delaying the conveyance or imposing any additional costs on the commerce. Compliance with the state crew requirements requires delay incident to taking on and letting off the additional crew member as the train moves across state boundaries, and also imposes a substantial additional cost on the interstate commerce.

Bibb v. Navajo Freight Lines, 359 U.S. 520, 3 L. Ed. 2d 1003, 79 S. Ct. 962 (1959) is the most recent decision of this Court cited by the lower Court that carefully treats the points significant in determining whether a state statute places an undue burden on interstate commerce. An Illinois statute applicable to, *but not discriminating against,* vehicles traveling in interstate commerce and which required a certain type of mudguard

on trucks and trailers was held invalid as unduly burdening interstate commerce.

Citing as involving a related problem, *Southern P. Co. v. Arizona,* and as more closely in point, *Morgan v. Virginia,* this Court concluded that the statute placed an impermissible burden on interstate commerce. It also rejected the argument that no showing of burden on interstate commerce is sufficient to invalidate local safety regulations in the absence of some element of discrimination against interstate commerce, saying that to support that contention it is necessary to read *South Carolina State Highway Dept. v. Barnwell Bros.,* 303 U.S. 177 in isolation from later decisions such as *Southern Pacific Co.* and *Morgan v. Virginia.*

In summary, the District Court correctly concluded that the commerce clause permits the states, acting pursuant to the police power in protection of public health or safety, to incidentally burden interstate commerce so long as Congress has not occupied the field, but such burden must produce a benefit to the public as a whole (not to a particular class), fairly commensurate with the cost, delay, inefficiency, and inconvenience produced by the regulation. To meet this standard the crew consist laws would have to produce a genuine and substantial (because their burden is substantial) element of public protection. Thus the statistical proof, standing alone, is enough to demonstrate the invalidity of these laws. The most modest claim that could be made for the statistics in evidence is that they conclusively demonstrate that railroad operations in states with predominately four man crews are at least as safe as comparable operations in Arkansas with six man crews.[1]

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[1] The constitutional test was well stated in the brief of the United States as Amicus Curiae filed in *Southern Pac. Co. v. Arizona* by Solicitor General Fahy and Special Assistant to the

In the light of these governing principles, the District Court stated the controlling issue as follows:

> ". . . whether under present railroad operating conditions the minimum six man crew requirements of the two Arkansas full crew statutes remain as valid exercises of the State's police power in the field of railroad safety or whether they now amount to arbitrary requirements which are unreasonable, oppressive and unduly burdensome on interstate commerce."

The Court emphasized that the Arkansas statutes "are presumed to be valid" that, "the burden is upon plaintiffs to establish the invalidity of the statutes and if upon a consideration of the whole record a reasonable doubt upon the question remains, that doubt must be resolved in favor of the validity of the statutes." Obviously, the District Court indulged every reasonable presumption in favor of the statutes and found them to be invalid only on the basis of overwhelming evidence establishing their oppressiveness and utter unreasonableness.

B. The District Court's Determination That the Requirements of the Arkansas Statutes Make No Significant Contribution to Safety and Impose an Undue Burden on Interstate Commerce Is in Accord With the Overwhelming Weight of the Evidence.

The record shows in detail the progressive obsolescence of the jobs of firemen and third brakemen in freight and

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Attorney General Robert L. Stern. Expressing views thereafter adopted by the Court in its decision, it is said at page 60:

> "In this connection it is important to note that our argument does not depend on whether the evidence affirmatively establishes that the effect of the train limitation is to increase railroad accidents generally, or that the limitation does not to some extent reduce the number of slack accidents. For, if, instead of having the harmful effect on the public safety found by the trial court, the law had no effect one way or the other or even a slightly beneficial one—and that is certainly the most which can be said for it—this would not be sufficient to outweigh the interference with interstate commerce which results from state regulation of the subject of train lengths."

yard service as a consequence of technological and other changes which have occurred over the past forty years. On this issue, the District Court found:

> "We find from the overwhelming weight of the evidence that by the mid-1950's, if not before, the fireman on a diesel locomotive and the third brakeman or helper had, in general, ceased to perform significant safety functions in the operation and switching of freight trains and cars" (A. 1203).

The dramatically changed methods and equipment with which these operations are now conducted, in comparison with the situations that existed at the time of the earlier cases, was fully developed. The factual conclusion that is supported by the overwhelming weight of the proof as a whole is that the number of men needed to conduct train and switching operations varies with the circumstances attending each assignment, but that in no event are as many as six men needed *to insure the safety of the operation.* Adding crew members in some instances might permit carrying out the assigned task more speedily. However, it has been held many times that the only consideration upon which these laws can be sustained is their purported contribution to *safety.* The proof discloses no basis to infer that a speedier operation would necessarily be a safer one. Human experience in every field of endeavor dictates a contrary conclusion.

In reviewing the various features of railroad operations, and making comparisons of present conditions with those disclosed in the earlier cases, it should be remembered that many of the circumstances attending those operations have no relevance whatever to the central question of whether six men are needed to safely operate a train. For example, the hazard of injury from "slack action" was discussed at length in *Norwood* (13 F.Supp. 29-30, 35) and, while considerably diminished, slack action

still presents a hazard of injury particularly to persons in the caboose (A. 105, 363). However, there is no causal relationship between slack action and the number of men in the crew. It occurs simply as the result of how the engineer handles the controls and how the equipment responds. In the context of safety, the only relationship between slack action and crew size is that the larger the crew the more men that are exposed to injury from this cause. Mr. Sheppard and Mr. Pelton concurred in the obvious logic of this observation (A. 105-6; 364).

In the first case concerning one of these laws the Supreme Court of Arkansas apparently gave some weight to the testimony that the automatic couplers had to be positioned by hand in some instances (86 Ark. 412, 420) and this feature is given considerable prominence in *Norwood.* This is still required on occasion (A. 101). However, even if it be assumed that this task is attended by certain hazards if not done prudently, it is still a one man job (A. 101). The fact that this one man task must occasionally be performed simply furnishes no basis for a rational argument that a six man crew is needed to handle a train safely.

Further, the fact that there are accidents in the railroad industry must be viewed in a reasonable perspective. There are accidents in all industries. The only relevant accidents are those which reasonably could be said to be avoidable as a result of the presence of the extra crew members required by law. There is a significant dearth of proof concerning such accidents in this case. In *Pennsylvania R. Co. v. Driscoll,* 9 A. 2d 621, 630, the Chancellor reviewed a number of accidents, apparently claimed to be avoidable by use of the additional men required by the statute, and concluded:

> "It is highly speculative to infer that an additional man would prevent them."

The Supreme Court of Pennsylvania concurred, at page 631:

> "Generally speaking, the accidents reviewed were attributable to human frailties, under circumstances which additional men could, or would, not remedy."

In the case at bar a number of intervenor's witnesses testified about crossing accidents in which they had been involved, and in each instance conceded that additional members of the crew could not have avoided the accident (PRX 11, pp. 10-11; PRX 12, pp. 16-18; PRX 13, p. 15; PRX 14, p. 14; PRX 15, pp. 18-21). Concerning such accidents, or near accidents, that they had been able to avert or minimize by performing their lookout duty, the firemen candidly admitted that anyone else sitting in the fireman's seat could have done the same thing (PRX 8, pp. 14-15; PRX 32, p. 30). They agreed with the principle that is commonly accepted by all who are knowledgable about train operations that in most instances there is nothing the train crew can do to avoid crossing accidents and that the principal cause is the carelessness of motorists (PRX 8, pp. 14-15; PRX 14, p. 14; PRX 15, pp. 18-21). In fact, in this record containing the testimony of over 100 witnesses there is only one accident mentioned that the witness attributed to lack of action of the train crew. Mr. Boyd described a crossing accident where a truck struck the locomotive on the fireman's side while the fireman was in the process of resuming his seat and the head brakeman was vacating it (PRX 12, pp. 19-20). The clear inference is that the diversion created by having one extra man in the cab was a major contributing factor to this accident.

When this Court first passed on the validity of the freight crew law in 1911, and when it later passed on both laws in *Norwood,* it simply held that the proof did not demonstrate the unconstitutionality of the laws *as applied to railroad operations at that time.* Therefore, the

manner in which railroad operations have changed since the records were made on which those two cases were decided was important to the District Court's inquiry here. The District Court recognized this and found in this regard that "since the *Norwood* decision great changes and improvements in railroad equipment and operating methods have been made, which changes and improvements have contributed largely to safety of operations" (274 F. Supp. at 298). The following discussion relates to the supporting evidence and the effect of the described changes on the crew size required for safe operations.

1. Changes in Railroad Operations Since the Trial of the 1907 Case.

In this suit the railroad contended that the third brakeman served no necessary purpose (86 Ark. 419). The Supreme Court of Arkansas listed seven circumstances shown by the evidence that it considered significant in sustaining the statute against this charge (86 Ark. 419-20). These follow along with the proof on the comparable present situation.

> 1. "They (train men) explained that there is an increased amount of work to be done since the adoption of the air brakes and automatic couplers, notwithstanding the brakemen are relieved of the duty of stopping trains (except in emergencies) by hand brakes. This is due to the increased tonnage of the trains, the increased capacity of cars, the increased number of cars in trains, the increased power of heavy engines, and the additional reports required to be made by conductors and inspections to be made by conductors and brakemen."

The practice in 1907 of using hand brakes to help retard the speed of the train in an emergency has been abandoned. The only occasion that a brakeman would ever

have to stop a train with the present brake equipment would simply involve manipulating the conductor's brake valve on the caboose or the emergency valve on the fireman's side in the locomotive (A. 88). This involves simply pulling a lever and is obviously a one man job (PRX 21, pp. 27-8).

Car capacity, tonnage, number of cars in trains and engine power have all increased substantially over those existing in 1907. But that evolution has not increased the work of brakemen. The technological improvement that accompanied these changes has substantially reduced the work of brakemen (A. 87-88). The conductor's paper work has been significantly reduced (A. 87), and inspections of trains are performed principally by mechanical forces at terminals, assisted by such modern equipment at hot box detectors (A. 116-17). When a train is inspected by members of a train crew, it is simply a visual observation and can be performed by one man (A. 109).

> 2. "In addition to these reasons, it is a daily occurrence for drawheads to pull out, owing to the heavy draught of the engines and the lack of corresponding strength of drawheads to meet them; and this usual happening requires the service of two, and frequently three men to properly chain up the cars, especially in the nighttime."

The structural strength of modern cars is such that the "pulled drawbar" is a much less frequent occurrence than in 1907 (PX 26, pp. 15-6; A. 48, 805-06). There are many days when there is not a single occurrence of this type on any of the some sixty trains operated daily in Arkansas by Missouri Pacific (A. 88-9). When it does occur, two men can "easily" take the necessary remedial action which now involves use of a 44 pound flexible cable instead of chains weighing about three times as much (A. 89-90).

3. "Much of the conductor's time is taken up with making his reports, and he cannot, under the present system, give as much time to the physical handling of the train as under the old system."

Mr. Sheppard testified that "The amount of time consumed in paper work at the present time is so small that he is available most of the time to perform other duties" (A. 87). Even the testimony of the intervenors' witnesses make it clear that the conductor's paper work is a minimal burden which can be performed at times when he is not needed in switching operations such as when the train is moving between stations. Mr. Hefner, a conductor, testified:

Q. In all fairness, Mr. Hefner, would you say from your experience that they relieved the conductor of quite a bit of paper work when they started supplying him with his wheel report at the initial terminal?

A. I would (PRX 27, p. 17).

He also made it clear that most of the reports that a conductor is required to prepare are made only on infrequent occasions (PRX 27, pp. 17-19).

4. "When there is a break in the train, or for any other cause it is stopped between stations, it is at once the duty of the conductor to send a brakeman back to flag approaching trains from the rear, and frequently it is his duty to send another brakeman forward to flag trains approaching from that direction. The necessity for signaling for these purposes frequently reduces the force to the conductor, engineer and fireman, unless three brakemen are provided. Safe operation and the rules of the company require that the engineer and fireman remain at their post in the engine."

On a diesel locomotive there is no reason for either the fireman and engineer to remain on the engine under these

circumstances, and advances in signal equipment have permitted rule changes pertaining to flag protection to such a degree that it is a rare occasion that a train stopped between stations would need to use a crew member as a flagman (A. 90-1). In these rare occasions, the duty of flagman is performed only briefly until it is insured that the adjacent track has not been fouled as a result of the emergency stop, then he returns to the train and is available to assist with any work to be done on the train (A. 91-2). Therefore, when a train is stopped between stations, all six members of the crew are available, either immediately or within a very brief period to assist with any work to be done on the train. The fact that flagging protection is no longer required on most occasions when a train stops between stations means that an extra crew member is now available for these purposes in contrast to the situation prevailing in 1907 and 1933. However, there are no conditions that occur to trains that require six men to correct (A. 92).

> 5. "Trains are frequently stopped at public crossings, and are frequently switched across public crossings; and oftentimes it occurs that the safety of the public requires the posting of signal men at these crossings."

Trains are still frequently stopped at, and switched across, public crossings, and when flagging protection is needed this is a one man job. The Uniform Code of Operating Rules so provides (A. 92).

> 6. "In switching, the services of brakemen are required to work the automatic couplers and connect and disconnect the air hose."

Operating modern couplers simply involves raising a lever on the side of the car, and like connecting air hoses which takes four or five seconds, is a one man job. Train-

men are no longer required to disconnect air hoses (A. 93).

> 7. "* * * in the opinion of these witnesses the safety of the train crew is promoted by having three brakemen to do the switching, in addition to which the train movements are made with more certainty and dispatch and with less danger of accidents, and the freight is handled more speedily."

Some of intervenor's witnesses in the case at bar have expressed the opinion that three brakemen contribute to the safety of operations. This opinion evidence is discussed in detail in a subsequent portion of this brief where it is pointed out that the expression of such opinions that are in conflict with the proven facts does not make the reasonableness of the statute "debatable" in a constitutional context. It is also pointed out that the witnesses expressing these opinions have obviously equated "safety" with speed and dispatch in railroad operations, as the language quoted above indicates some of the witnesses in the 1907 case did. Of course, it has long been settled that the validity of these laws turns on the question of their contribution to safety alone.

In summary, none of the conditions shown to have existed in 1907 that might rationally have been considered to support a finding that a third brakeman contributed to safety of railroad operations exists in such form as to support a similar finding today.

It is interesting that the Supreme Court of Arkansas considered it noteworthy in support of its conclusion that the requirement of a third brakeman was not demonstrably unreasonable that the largest railroad in the state voluntarily used three brakemen on certain assignments. Certainly that fact did have probative value on that issue, just as the fact that virtually every railroad in the nation

today uses no more than two brakemen (unless inhibited by state law) has probative value on the issue of whether a third brakeman is required for safe operations under present conditions (PX 18, Report of President's Advisory Committee; PX 19, pp. 54-7).

Comparison of railroad operations shown in the 1907 record and those existing today is of particular relevance on the Commerce Clause issue. The *Norwood* court considered that issue foreclosed by the earlier decisions, and passed on only the Fourteenth Amendment challenges. 13 F.Supp. 24, 25. Thus, the changes in the impact of these statutes on interstate commerce must be measured from 1907 and 1913 when the laws were enacted and immediately tested in the courts. Those first cases are the last judicial examination of the impact of these laws on interstate commerce until the case at bar.

The decisions in the suit testing the 1913 enactment do not describe railroad operating conditions in sufficient detail to permit meaningful comparisons with current conditions. The courts seemed to regard such conditions as not significantly different from those shown in the 1907 record. However, one comparison that merits particular notice of the impact of both of these laws in the early days after their enactment is supplied by *Norwood*. In the first full year after the enactment of each of these statutes (1908 and 1914, respectively) the cost of compliance with these statutes to St. Louis, Iron Mountain & S. R. Co. (predecessor to Missouri Pacific R. Co.) was $76,980 for the freight crew law and $54,800 for the switch crew law (13 F.Supp. 24, 34). This represents a total annual cost of $131,780. This annual cost of compliance to Missouri Pacific had increased by 1965 to a total of $3,523,173 (PX 85). There can be no doubt about the relevance of this change to both the Commerce Clause and Due Process Clause issues.

2. Changes in Railroad Operations Since the Trial of Norwood.

In *Norwood,* the Attorney General of Arkansas, representing the defendants, listed in his post-trial brief the facts in evidence that he claimed tended to justify the crew consist laws. That listing composed of pages 123-132 of his brief is PX 99. At the trial of the case at bar Mr. Sheppard testified concerning the relevant changes from the conditions shown in PX 99 (A. 94-114). It is a fair summary of that testimony that no circumstance reflected in PX 99 that could be regarded as tending to justify the need for six crew members continues to exist, considered alone or cumulatively with the other circumstances attending present railroad operations, to such a degree that it tends to justify a need for a six man crew today.

It should be noted that Mr. Sheppard is unusually well qualified to testify concerning these changes in railroad operations in Arkansas. He entered the industry as a brakeman in Arkansas in 1936, so his knowledge of these operations is generally contemporaneous with those reviewed in *Norwood.* While he had assignments outside of the state from time to time, Arkansas has been the center of gravity of his railroad service. He has always had assignments involving running trains and switching operations, or supervising these activities, and he is now General Manager of the Southern District comprising virtually all of the Arkansas operations of a railroad which operates about 50% of all the railroad trackage in Arkansas. Five to six thousand employees work under his supervision (A. 86).

It would unduly extend this brief to set out each of the changes related by Mr. Sheppard, but we commend that portion of the transcript (A. 94-114) for examination because of the vast improvement in the safety of railroad operations, and extensive reduction of work to be performed by train crews, it portrays. Of course, as Mr.

Sheppard points out, these changes have been adopted to substantially the same extent by all of the appellees. Survival in this highly competitive industry makes this imperative (A. 117-8; 126-8).

The magnitude of the changes in railroad technology and operating practices since the time of the *Norwood* decision is also shown in great detail by the testimony and exhibits of Mr. German and Mr. Rich with respect to motive power (PXs. 22, 23, 24; A. 47-48, 647-711, 734-62), Mr. Meinholtz with respect to freight cars and related equipment (PX 26; A. 48-49, 792-817), Mr. Marak with respect to signal appliances and equipment (PXs. 27, 28; A. 49, 830-58), Mr. Alford with respect to methods of dealing with hot boxes (PX 29), Mr. Laird with respect to roadbed and structures (PX 30), Mr. Malott with respect to yard operations (PX 31) and Mr. Troth with respect to means of communication (PX 77). The evidence presented by these witnesses is indeed a most detailed and persuasive delineation of the revolution in technology and practices which has characterized railroad operations since the time of the *Norwood* decision.[1]

The *Norwood* court mentioned a number of circumstances that it apparently thought relevant to support

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[1] President Kennedy's Message to Congress preceding the enactment of Public Law 88-108 contained the following description of the technological and related changes underlying the manning controversy in the railroad industry and the effect of these changes on the number of employees needed for safe operations:

> "The rapid replacement of steam locomotives by diesel engines for 97 percent of all freight tonnage has confronted many firemen, who have spent much of their career in this work, with the unpleasant prospect of human obsolescence. The introduction of self-propelled vehicles for railroad maintenance, repair and construction work—the use of longer, heavier, faster and more efficiently filled trains—and the initiation of centralized traffic control, electronic inspection equipment, telephonic and radio communications, and automatic switching and braking equipment have all decreased the need for railroad employment" (PX 18).

these statutes, and the proof in the case at bar shows significant differences in the present comparable circumstances. Most of these changes are alleged in paragraph 12 of the Complaint and we set out some of them here to demonstrate that the District Court measured the need for a six man crew on facts showing railroad operations with differences from those in *Norwood* as extensive as those between a stage coach and modern Greyhound bus.

a. Locomotives.

Norwood described in detail the character of motive power used by Missouri Pacific, and listed its inventory of steam locomotives in 1931 as 824 freight locomotives and 217 switch engines. The figures supplied in the opinion reveal that 410 of the freight locomotives had been in service since prior to 1908. 13 F.Supp. 26-7. On July 1, 1966, this Company had 110 freight locomotives, 158 switch engines, and 416 multiple purpose locomotives available for either freight or switching service (PX 23, p. 72), and each of these locomotives employed diesel-electric power. The last steam powered locomotive was retired by Missouri Pacific in 1955 (PX 22, p. 13; A. 47-48, 657). None of appellees operate any steam locomotives today. The only steam locomotives still operating in the state belong to a railroad exempted from these laws (PX 52). This complete conversion to diesel-electric motive power substantially reduces hazards and discomfort to crew members, and eliminates the duties previously performed by the fireman (PX 22, 23 and 24; A. 47-48, 647-711, 734-62). During the year ending June 30, 1931, 16 persons were killed and 259 injured due to failures in steam locomotives on all Class I railroads in the United States, and during the 10-year period ending June 30, 1931, six persons were killed and 169 injured from this cause on the Missouri Pacific alone (PX 23, p. 6). Locomotive improvements contributing to safety of employees

have been such that in 1965 no person was killed or injured due to failures in diesel locomotives on any Class I railroad in the United States and only ninety-three persons received injuries due to defects in diesel locomotives (PX 23, p. 71). Since 1937 no person has been killed due to a defect in a Missouri Pacific diesel locomotive, only 32 have been injured from such cause, and only three persons have sustained such injury in Arkansas (PX 23, p. 71).

b. Freight cars, couplers, brakes, trackage and roadbed.

Improvements made since the Norwood decision have included strengthening rolling stock, complete elimination of arch bars and wooden underframes on cars, adoption of journal lubricator packs, strengthening couplers and journals, and employment of roller bearings (A. 94-96; PX 26, A. 48-49, 792-817). There also has been installation of heavier rail, elimination of untreated ties, employment of mechanized laying of rail and tamping of ballast, chemical control of vegetation on right-of-way, all to the end of achieving a much more stable and safe roadbed (PX 30). Sidings have been lengthened and new sidings have been constructed so that opposing trains may pass without the delay, and possible hazards, of a "saw-by" (A. 101-2). Improvements in yards have included vastly improved illumination to insure safety during the hours of darkness, and construction of electronic classification yards which eliminate the practice of crew members riding on moving cars to control them with hand brakes (PX 31). Improvement in signal equipment has included installation of automatic block signal and centralized traffic control, installation of radio equipment for communication between cabooses, engines and base stations, and adoption of safety devices such as hotbox detectors, dragging equipment detectors, broken flange and loose wheel detectors, slide detectors and high water detectors (PX 27). More effective

braking systems have been adopted (PX 26). The interstate highway system has resulted in grade separations on the highways carrying the heaviest volume of traffic (A. 114), and the number of railway-highway grade crossings on Missouri Pacific in Arkansas has been reduced from 1,821 reflected in *Norwood* (13 F.Supp. 34) to 1,747 in 1966 (Interrogatory No. 80, PX 82). Automatic signal devices at grade crossings have been improved and installed to the extent that Missouri Pacific has 232 such devices in use in Arkansas compared to 95 in 1930 (PX 27, p. 25).[1] The effect of the foregoing improvements has been to reduce greatly the hazards encountered by employees in freight and yard service, and to members of the public exposed to train operations (A. 307-08).

c. Operating Methods and Duties of Trainmen.

Duties of trainmen have been greatly diminished by elimination of water stops that were necessary for steam locomotives. Water tanks were located every 15 to 20 miles along the right-of-way, and engineers seldom passed one without stopping to take water. Now, trains are operated great distances without stopping for fuel and water. For example, Missouri Pacific operates trains from Dupo,

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[1] In this connection, appellants assert that "most Arkansas track is 'dark railroad' ungoverned by any type of automatic signals" (Brief, p. 42). The fact is that virtually all of the main line mileage in Arkansas, over which most of the traffic moves, is protected by centralized traffic control or automatic block signals which has been installed since the time of the *Norwood* decision (PX 27, pp. 13 and 16; PX 29, pp. 1-2; PX 25, pp. 8-9; PX 46, p. 2; PX 77, p. 30). Branch lines, which frequently have only one train per day operating over them may not have automatic signal protection but such protection is obviously unnecessary on such lines (PX 27, p. 7). Moreover, data for all railroads in the United States shows a greater proportion of mileage unprotected by automatic signals than is true of the mileage in Arkansas (PX 28, p. 18). Signal protection in Arkansas is thus superior to that prevailing in the other states in which operations are conducted with smaller crews.

Illinois to Texarkana, a distance of 491 miles, without stopping for fuel or water (A. 79). Many stations and spur tracks at which stops previously were made have been closed (A. 66-7). Handling of less than carload freight by road crews has been eliminated (A. 66). At, and prior to, the time of *Norwood* decision much of a freight crew's time was required to load and unload, l. c. l. merchandise in freight cars, and handling and delivery of this freight is now done by other employees using trucks. Handling of l. c. l. freight obviously required more physical exertion than any of the present-day duties of trainmen. Merchandise weighing up to several thousand pounds was included in this category, and bales of cotton weighing 500 to 550 pounds were frequently carried in this area (A. 66). The testimony of intervenor's witnesses reveal an interesting aspect of handling such freight. It was frequent practice for one or more members of the train crew to load and unload l. c. l. freight while the balance of the crew did station switching (PRX 19, p. 6; PRX 21, p. 9; PRX 23, pp. 23-4). What better illustration could there be of recognition that even with steam locomotives less than the full six men on these crews were adequate to perform the switching.

Trainmen are no longer required to ride in the middle of trains (A. 107), nor on the tops of trains, and rules of Missouri Pacific prohibit riding on the top of a moving car (A. 104). Improved equipment heretofore referred to has greatly reduced "emergency" situations on the road requiring the performance of any work by train crews, and improved communication and mobile repair equipment has shifted the principal burden of that work from train crews to maintenance employees who are called to correct malfunctions on the road (A. 69). *Norwood* described hotboxes as the "most frequent" equipment malfunction creating emergency duties for train crews (13 F.Supp.

33). As is reflected by that opinion, and also the testimony here, it was customary at that time for the train crew to "rebrass" hotboxes which was a job of considerable magnitude involving jacking-up the car and replacing the damaged brass element (A. 68-9). This is no longer done by train crews, and although one of intervenor's witnesses claimed in his testimony that one of a fireman's duties was to insure that the engine carried hot box repair equipment (IX 8, p. 3), he conceded on cross-examination that this testimony was "inadvertent" and that it had been at least twelve years since he helped rebrass a journal on the road (PRX 8, pp. 9-10). Reduction of hotboxes on Missouri Pacific has been such that in 1965 there occurred one hot box per 1,147,563 freight car miles compared to one hot box per 140,278 in 1931 (PX 82, Interrogatories Nos. 141 and 142).

The conductor no longer is required to spend more than a few minutes on record keeping functions on a run (A. 87, PRX 27, p. 17), and the fireman no longer has any duties with regard to firing the locomotive or tending the boiler (PX 22, 23 and 24). As alleged in the complaint (Par. 12 (c)) the diminution of hazards incident to Missouri Pacific's operations resulting from the foregoing improvements has been sufficiently effective that in the years 1958 through 1962, train and yard service accidents in Arkansas produced injuries to all persons at an average rate of only .00045 per 100,000 car miles, and .02534 per 100,000 train miles, as compared to corresponding injury rates for the 1924 through 1928 period considered by the court in the *Norwood* case of .00276 per 100,000 car miles, and .07176 per 100,000 train miles (A. 307-8).

The improvement in safety of operations attributable to these technological and related changes is also most apparent from a comparison of the accident data relied upon in the *Norwood* case and the current similar data.

Following its suggestion that "the business of plaintiff is still very hazardous" the District Court in *Missouri Pac. R. Co. v. Norwood,* 13 F.Supp. 24, stated:

> "In 1928 (the system), there were 308 collisions and 494 derailments. In that year 45 employees were killed and 1,189 injured in service" (p. 35).

In 1965, collisions were one-tenth of the 1928 figure, derailments approximately one-fifth and total train accidents one-tenth of the 1928 train accidents on the Missouri Pacific (PX 109, p. 24; A. 234, 997-98). There were seven employee fatalities in 1965 in contrast to 45 in 1928 and employee injuries in 1965 totaled only a small fraction of the 1928 injuries (PX 109, p. 24; A. 234, 997-98). It is indisputable, therefore, that railroad operations are now incomparably safer than they were at the time of the *Norwood* decision.

3. Opinion Evidence.

All, or virtually all, of the 34 witnesses whose testimony was served prior to the trial by the intervenors testified to the general effect that it was their opinion that a minimum crew of six men was required for safe railroad operations (IX 1-27, 29-35). Twenty-two of these witnesses were officers and members of the Brotherhood of Locomotive Firemen and Enginemen and their opinions were expressed in terms of the contribution of the fireman to the safety of operations. The following are typical of the opinions so expressed:

> "From my experience as a fireman and as an operating engineer, it is my opinion that the presence of the fireman on these trains is absolutely necessary for the safety of the crew and of the general public" (IX 1, p. 2).
>
> "Because of the many train orders and other special instructions and orders it is very necessary that the

fireman be present in order to call the engineer's attention to anything which he might overlook and to help the engineer keep a lookout for both the crew members and the general public when moves are being made" (IX 2, p. 11).

Twelve of these witnesses were officers or members of the Brotherhood of Railroad Trainmen,[1] and their opinions were directed toward the alleged need for a train crew consisting of a minimum of a conductor and three brakemen. These are typical:

"It is my opinion because of the situations and conditions that I have described over the various lines of the Rock Island Railroad that it is absolutely necessary to have a train crew of three brakemen and a conductor in order to perform the operations safely" (IX 5, p. 19).

"It is my opinion that a full safety crew is necessary for the safe operation of these trains" (IX 34, p. 12).

It is readily apparent that many, if not all, of intervenors' witnesses equated "safety" with "speed". Mr. Acton, the very first witness presented by intervenors (IX 1) candidly conceded that it was speed, and not safety, that he felt was affected by use of a crew less than six. He described an assignment on which he had worked between El Dorado, Arkansas, and Alexandria, Louisiana, that operates between Alexandria and Ruston with a five man crew, and then an extra brakeman is

[1] In addition to these 34 officers and members of the B. L. F. & E. and the B. R. T., Mr. Wilkerson and Mr. Pelton who testified on behalf of intervenors at the trial were, respectively, a member and a former member of the B. L. F. & E. Mr. Pelton was the only member of the Brotherhood of Locomotive Engineers to testify, and it was apparent that he did not purport to represent that organization in appearing as a witness.

added to comply with the Arkansas law between Ruston and El Dorado. He was then asked:

> Q. Do you experience any difficulty getting over the roads with that five-man crew?
>
> A. It depends on whether you have any hotboxes or anything where you might need that particular brakeman. Yes, in some instances. *If time is a factor* and I understand that is what they want to do is move this freight. (PRX 1, p. 22.)
>
> Q. Between Ruston and Alexandria with a five-man crew, have you ever encountered a situation where the five-man crew couldn't do whatever work was required to move the train onto the terminal?
>
> A. Certainly it could be done with one man *if he took enough time.* (PRX 1, p. 23; emphasis supplied.)

Mr. Rouse who worked on assignments in Kansas and Oklahoma with four man crews had described in his direct testimony (IX 7) why he felt six men were necessary when a drawbar pulled and was asked on cross-examination:

> Q. Now, when you pull a drawbar up in Kansas or Oklahoma or Missouri, how do the four men that operate the train handle that situation?
>
> A. Well, we have taken as long as two hours to set out a drawbar on the first district because we couldn't see signals and wait until they got over there.
>
> Q. That was on a train crew consisting of how many men?
>
> A. Four men.
>
> Q. It took you a little longer?
>
> A. Yes, sir.
>
> Q. You didn't injure anybody in the process, did you?
>
> A. No, sir, not when I was on the crew, no, sir. (PRX 7, pp. 12-3.)

Mr. Cross (IX 9), who worked in Louisiana with a five man crew, was asked:

> Q. How do your operations on the Shreveport to Vivian turn with a five man crew differ from the operations on that same run when you have the Arkansas man along?
>
> A. Takes longer doing the switching.
>
> Q. Takes longer with the Arkansas man or with out him?
>
> A. Takes longer without the Arkansas man, shorthanded. (PRX 9, p. 8.)

Mr. Blasingame (IX 10) who worked in Oklahoma on the Kansas City Southern Railroad with a four man crew was asked:

> Q. Did you all get from Heavener to Watts with that four-man crew?
>
> A. We got there. It created hardships in instances.
>
> Q. When you say "hardship" do you mean it takes longer?
>
> A. Yes.
>
> Q. To perform the switching operation?
>
> A. Yes. (PRX 10, 11-2.)

Mr. Crissman who was working in through freight service on the St. Louis-Southwestern Railroad between Pine Bluff and Jonesboro at the time he testified had expressed the opinion that six men were needed to operate that train and that "At times you need a dozen." (PRX 31, p. 22.) Asked to explain why he thought six men were needed, he said:

> Q. For what purpose do you need six men to move a train in three hours and thirty minutes between Jonesboro and Pine Bluff?
>
> A. You get efficient operation.

Q. Is that all you can tell me in support of your opinion?

A. That's my answer. (PRX 31, p. 22.)

Likewise, Mr. Chesshir attempted to justify the need for a six man crew by describing in detail the various tasks each man performed in various switching operations. However, his cross-examination makes it clear that one man could perform the duties that are divided among several when there are six men in the crew at a sacrifice of time only.

Q. What is there to keep one man from performing both of those operations?

A. There actually isn't any other than the time involved, * * *" (PRX 22, p. 10).

The same preoccupation with speed of operations as the basis of his opinion that a six man crew is needed appears in the testimony of Mr. Hefner who had testified that he worked on a local freight assignment between Thayer, Missouri and Memphis on the St. Louis-San Francisco Railroad with a five man crew during the period this Court's injunction restraining the enforcement of these laws was in effect. He testified:

Q. Did you have any difficulty with this five man crew getting your train from Thayer to Memphis and from Memphis to Thayer?

A. *Well, it would slow you down some if you had trouble.*

Q. Did you do the same switching operations that you describe in your testimony here with that five man crew?

A. We would switch the best we could. *It would just take us longer to do it* (Emphasis supplied, PRX 27, pp. 7-8).

Mr. Hefner had also testified that he had observed four man crews performing switching operations around

Thayer, Missouri. His conclusion pertaining to that operation is again in terms of speed, not safety.

> Q. Did it appear to you that they may do it more slowly than you can do it down in Arkansas with six men?
>
> A. Yes, sir. (PRX 27, p. 10.)

That the real basis of their expressed opinions that six men were needed was that the additional men promoted speed of operations, not that they contributed to the safety of those operations, is evident from the testimony of other witnesses who testified on behalf of the intervenors (PRX 5, p. 6; PRX 8, pp. 5-6; PRX 11, pp. 16, 22-3; PRX 16, p. 32; PRX 33, p. 17; PRX 35, p. 11). At the trial Mr. Pelton showed the same concern. After testifying that Missouri Pacific Railroad was willing to accept or tolerate delays "in the interest of safety alone," and that safety has always been the first consideration in the operations of that railroad, he was asked:

> Q. Mr. Pelton, would it fair(ly) characterize your position in this matter to say that reducing the number of men on a train crew tends to slow down the operations?
>
> A. When there is no trouble, in other words, no defective equipment, no bad conditions, it wouldn't slow down. It is when you have the hotboxes and defective equipment back in the middle of the train——
>
> * * * * * * *
>
> Q. Had you finished your answer about slowing down the operation?
>
> A. Under the total picture of railroad operation from terminal to terminal, day in and day out, I feel it would slow down operations. Not just one isolated incident (A. 369).

To put what Mr. Pelton is advocating in perspective, it is well to remember that the "emergency" situations

that he testifies can be handled more speedily with extra men in the crew do not occur on every train or every switching assignment. The hotboxes he mentions have been so reduced on his railroad that they now occur only once in 14,946 freight train miles (PX 82, Interrogatory No. 143). Thus if the average freight run were assumed to be 150 miles (although 100 miles is the "basic day" for pay purposes), Mr. Pelton can expect to encounter a hotbox in only about one out of each 100 trains he operates. Concerning the "defective equipment" that Mr. Pelton feels could be corrected more expeditiously with a six man crew, Mr. German testified that delays in excess of five minutes due to such defects in diesel locomotives in 1965 averaged only about one a day on the entire system over which an average of 710 to 720 such locomotives were operating each day (A. 551). This is true notwithstanding the absence of the fireman from many of the trains in the other states in which Missouri Pacific operates, and the fact that in those states the typical crews are composed of four or five men. In fact, Mr. German testified that there has been no discernible difference in the incidence of such delays since the process of removing firemen in the other states began (A. 551).

Weinberg v. Northern Pac. R. Co., 150 F. 2d 645 (8 Cir., 1945), is responsive to the argument that additional men can be justified to handle infrequent emergency duties:

> "It would clearly be unreasonable and arbitrary to hold that this Diesel engine should carry one extra member of a crew at all times because of such possible emergencies which are shown to be infrequent, and to the exigencies of which neither management nor employees are shown to be lacking in the desire or ability to respond" (p. 652).

Many of intervenors' witnesses stressed the need for six men in switching operations because curvature of the

tracks and visual obstructions at certain points made it necessary to station men along the track to pass signals, or required that the signals be given from the fireman's side and relayed by him to the engineer. However, as further evidence that it was speed, not safety, that prompted their opinions that six men were needed, these witnesses conceded that by reducing the number of cars handled on each movement at such locations, the operations could be performed by fewer men. For example, Mr. Kelley described a switching operation at Marianna where the crew limited the number of cars handled to seven or eight on each movement to permit signals to be passed from the engineer's side. He was asked:

> Q. Is this something that you do, Mr. Kelley, at other places where you perform switching operations, that is, limit the number of cars that you handle in any particular movement so that you can pass signals from the engineer's side?
>
> A. Usually that is correct. We try to handle what we can best work with (PRX 23, pp. 28-30).

Other witnesses for intervenors agree (PRX 2, p. 6; PRX 3, p. 8; PRX 5, pp. 24-5).

That such conditions making it necessary to reduce the number of cars handled in a single movement in order to facilitate passing signals are also highly infrequent is illustrated by the testimony of Mr. Paul, State Legislative Chairman for the B. L. F. & E. He agreed that if signals can be passed on the engineer's side, they are passed on that side, and that "in the vast majority of switching operations, they can be passed from the engineer's side" (PRX 17, p. 20).

Many of intervenors' witnesses had worked on or observed railroad operations with crews of less than six men in other states, on trains operated by appellees which were

within the exemptions of the Arkansas law or by the exempted railroads in Arkansas. Some of their testimony reflecting this experience and knowledge is at PRX 5, pp. 31-2; PRX 8, pp. 5-6; PRX 9, pp. 7-8; PRX 10, p. 10; PRX 13, pp. 12-3, 16-7; PRX 15, pp. 13-7; PRX 16, pp. 14-7; PRX 25, pp. 4-5, 7-8; PRX 29, pp. 5-6; PRX 31, pp. 14-5; PRX 33, pp. 21-2; and PRX 35, pp. 4-6. Nothwithstanding this broad opportunity to know about any increased hazards incident to operations with smaller crews, if indeed there are any such increased hazards, not one of these witnesses was able to cite a single instance of an accident or injury attributable to the absence of additional men on these crews. The witnesses testifying for intervenors have had an aggregate of approximately one thousand years of railroad experience, yet not one knew of an accident that could have been averted if the crew had consisted of the six men they claim are necessary for safe operations.

When asked if they had knowledge of accidents occurring during the operation of the smaller crews with which they had been associated, many denied knowledge of any accidents at all involving these crews. For example, Mr. Wallace testified concerning four-man switch crews that had been working in the yards at Pine Bluff since 1959[1] and which he had the opportunity to observe daily:

> Q. Is there any injury or accident that has occurred in connection with the operation of those four-man crews to your knowledge that were attributable to there not being a larger number of men on the crew?
>
> A. I couldn't say.
>
> Q. If there were such an accident, you don't know about it?
>
> A. That's right. That is correct (PRX 35, pp. 5-6).

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[1] These assignments are exempted from the switch crew law solely because the Cotton Belt yards at Pine Bluff are outside of the city limits (PX 32, pp. 7-8). There are public road crossings in the yards (IRX 32, p. 15).

Mr. Pelton, with years of experience supervising railroad operations outside of Arkansas with crews smaller than six men could not point to a single accident attributable to the smaller crews. He was asked:

> Q. Did you ever have a man hurt under your jurisdiction, Mr. Pelton, while working as trainmaster or assistant trainmaster under circumstances you attributed to the absence of additional crew members of the crew to which he was assigned?
>
> A. In evaluating it in that light, I don't know. I didn't evaluate things in that light * * * (A. 343).

Mr. Pelton's inability to back up his opinion with some credible *facts* may account for its failure to impress the Presidential Railroad Commission, Arbitration Board No. 282 and the Nebraska court, each of which heard and rejected his opinion in this matter (A. 346-7).

It was no doubt significant to the District Court in assessing the credibility of the witnesses expressing the opinion that six men is the minimum safe crew that they had not in their collective conduct through the intervening organizations of which they are members manifested such an opinion. The national railroad manning dispute involved, among other things the proposal of the intervenors here for a national rule or agreement providing for a minimum train crew of a *conductor and two helpers,* and a yard crew of a *foreman and two helpers* (PX 19, p. 54). This is one man less than these witnesses testified in this case is necessary *at a minimum* for safe railroad operations. Further, these intervenors have entered into collective bargaining agreements with railroads all over the country, including the appellees, that prescribe minimum crews of substantially less than six men (PX 78, pp. 14-7). They have made such agreements with the railroads in Arkansas that are exempted from one or both of the laws (PX 48, PX 49, PX 53,

PX 54, PX 59, PX 64). With two or three exceptions, all of intervenors' witnesses are officers or former officers of these labor organizations and can certainly be presumed to know, and influence, their policies and activities, obviously, it taxed the District Court's credulity to hear them testify that six men are the minimum that can safely operate a train, and at the same time make proposals and agreements fixing smaller crews.

The flexibility of the opinions of these witnesses, dependent upon the forum in which they are expressing them, is illustrated by the testimony of Mr. Newcomb who testified:

> "It is my opinion that on all the jobs that I described it is absolutely necessary that there be a crew consisting of an engine foreman and three yard helpers in order that the operations be performed with safety to the crew and to the general public. * * * To operate with fewer men than we now have on these jobs would increase the hazards both to the crew and to the public." (IX 20, pp. 22-3.)

On cross-examination it developed that Mr. Newcomb is Local Chairman of the B. R. T. at the North Little Rock Missouri Pacific terminal (PRX 20, pp. 5-6). As such he is a member of the General Grievance Committee of that organization on the Missouri Pacific system, and this is the committee with authority to serve notices proposing changes in labor agreements under Section 6 of the Railway Labor Act (PRX 20, p. 6). He acknowledged that his committee had served, and there was pending at the time he testified, such a notice on Missouri Pacific to fix crew consists on that railroad at a foreman and two helpers. While smaller than the crew of a foreman and three helpers required by Arkansas law, this is larger than some yard assignments in other states fixed by the Special Boards of Adjustment. Relevant to Mr. Newcomb's opin-

ion as to whether the crew proposed by his committee was safe, he was asked:

> Q. I take it that as a member of the General Grievance Committee, you would not approve a notice which would result in a crew consist smaller than you consider to be safe, would you, Mr. Newcomb?
>
> A. No, I would not. (PRX 20, p. 9.)

In contrast to the opinions of these witnesses for intervenors that are entirely without factual support in this record, there is the testimony of many witnesses, all with unquestioned expertise in railroad operations, who express the opinion that the maximum safety of railroad operations can be achieved with crews of four or less. These opinions differ from those of intervenors' witnesses not only in the conclusion expressed, but also differ qualitatively in that *there is ample factual support for them in this record.*

The District Court heard Mr. Sheppard express his opinion pertaining to the safety of railroad operations conducted with crews of less than six men. Unlike the opinions expressed by intervenors' witnesses, this was not a speculation drawn out of thin air in conflict with the physical facts in evidence, nor a misconceived effort to equate speed with safety, nor a professed judgment contrary to that manifested by his conduct. The facts upon which he predicated his opinion were in evidence. He had supervised and participated in train operations in other states for many years with crews of less than six, but had never known of an accident that could be attributed to the absence of an additional man on the crew (A. 119-20). He had supervised and participated in train operations in Arkansas and elsewhere during strikes using three and four man crews of employees whose duties normally did not involve operation of trains, and even with such inexperienced personnel the operations were conducted with-

out injuries attributable to the absence of additional crew members (A. 119-20). See PX 102 listing regular jobs of employees who operated the trains in a recent strike without incurring any injuries of sufficient severity to report.

It is on these facts—established in this record without dispute—that Mr. Sheppard based his opinion appearing at A. 131.

> Q. Mr. Sheppard, in your opinion is any switching operation conducted by Missouri Pacific in Arkansas under your jurisdiction that you need six men to safely perform the operation?
>
> A. No, sir.
>
> Q. Is there any switching operation conducted in Arkansas by Missouri Pacific that you cannot safely cause to be operated by four men?
>
> A. There is none that I know of.
>
> Q. Is there any train runs, freight trains, either in local or through freight service in Arkansas by the Missouri Pacific that you need six men to safely operate?
>
> A. No, sir.
>
> Q. Is there any train run by Missouri Pacific in Arkansas that you could not safely, any freight train that you could not safely operate with four men?
>
> A. No, sir.
>
> Q. What is the effect on safety of members of the train or switching crew by requiring the use of the six men?
>
> A. That merely puts additional men on the crew, which creates an additional hazard of getting someone hurt by virtue of having more men than you need. And with more men than you need to do a particular job, quite often it is practice that they divide the work, and as a result no one does the job properly. It is left undone.

Other opinion testimony introduced by appellees stands on a factual foundation similar to that which supports Mr. Sheppard's conclusions. PX 1 through PX 14 contain the testimony of 14 Missouri Pacific road foremen of engines, trainmasters and assistant trainmasters. These are the officers of the company who have the direct responsibility of day to day supervision of train operation, and who ride trains regularly as a part of their duties. For example, Mr. Spurr, a road foreman of engines, testified that he rides an average of six trains a week (PX 1, p. 2), and Mr. Halferty, a trainmaster, who testified at the trial concerning the film of operations at McGehee, testified he rides 10 to 15 trains per month (PX 7, p. 31). Most of these men had been switchmen, brakemen or enginemen before being promoted, and collectively they represent many years of railroad operating experience.

They each expressed opinions to the effect that safety did not require a crew of as many as six men on the railroad operations with which they were familiar. The opinions, like Mr. Sheppard's, were grounded on actual supervision of, or participation in, operation with crews of less than six men. As a further factual basis for these opinions, these witnesses relate observations made during mid-1966 when they rode a total of 75 freight trains for the purpose of observing what duties were performed by crews of various sizes under actual operating conditions.

These seventy-five trains were a typical cross section of the trains operated by Missouri Pacific (A. 195). They were selected by the witnesses to coordinate conveniently with their other work (IRX 1—IRX 14). PX 15—PX 17 are schedules reflecting statistical data based on the observations of these witnesses. No accidents occurred during the 75 runs.

A number of these trains were through freight trains on which the witnesses relieved each other as observers

when the crew changed at each division point. For example, the crew on a train moving south from Dupo, Illinois would change at Poplar Bluff, Mo., North Little Rock, Ark., Texarkana, Tex. and Mineola, Tex. The crew from Dupo to Poplar Bluff and Texarkana to Mineola typically consisted of four men, and the crews from Poplar Bluff to Texarkana consisted of six men as required by Arkansas law.

In PX 1—PX 14 the witnesses make it clear that there is nothing about the operating characteristics of these trains inside of Arkansas, in contrast to those outside of this state, that creates a need for two more men in the crew during the Arkansas segment of the trip.

PX 33—PX 41 present testimony pertaining to a similar survey made by nine operating officials of the Cotton Belt Railroad in June and July, 1966. The witnesses report on approximately 75 trains that they rode. No accidents occurred. Here again many of these trains were through freight trains traveling the Cotton Belt main line between East St. Louis, Ill. and Corsicana, Tex. Six separate crews successively operate the train between these two points. Those outside of Arkansas are typically four or five men (depending on whether a "10% veto" fireman is present) and those in Arkansas are the six man statutory crew. The testimony indicates no differences in the operating circumstances of these trains within Arkansas contrasted to those outside of Arkansas that would warrant a larger crew on the Arkansas segment of the journey. The opinions of these witnesses, and the facts upon which they are based, are similar to those contained in PX 1—PX 14.

A good illustration of the absurd effect of the Arkansas laws, as well as their impact on interstate commerce, is furnished by the testimony of Mr. W. J. Lacy, Superintendent of the Cotton Belt Railroad. His railroad

operates eight through freight trains daily from East St. Louis, Ill. to Corsicana, Tex. where they are interchanged in their entirety, including locomotives and cabooses, with the Southern Pacific Railroad (of which Cotton Belt is a subsidiary (IRX 32, p. 25), for the balance of the trip to Los Angeles, Calif. (PX 32, p. 8.) The total distance is 2,452 miles, and only on the Arkansas segment of the journey is a six man crew employed. On the balance of the trip a four or five man crew is employed, depending on the presence of "10% veto" firemen and the operation of an attrition agreement concerning employment of brakemen on the Southern Pacific.

Based on these facts, and his experience as the operating official responsible for all phases of train and yard operations on the Cotton Belt Railroad (PX 32, p. 1), Mr. Lacy expresses this opinion:

> "* * * I know that our operations in Arkansas can be conducted without a fireman or third brakeman or helper just as safely as they have been and are being conducted in Illinois, Missouri, Louisiana and Texas" (PX 32, p. 10).

Operating officials of the St. Louis-San Francisco Railway Company report on a survey they conducted on that railroad in mid-1966, similar to those reflected in PX 1-PX 14 and PX 33-PX 41, and based on the observations made during this survey, and their experience in the railroad industry, they express the opinion that operations on their railroad could be conducted in Arkansas safely with crews of less than six men just as they are being so conducted in other states (PX 75-PX 76).

Similar opinions are expressed by other witnesses possessed of unassailable railroad operating or technological expertise (PX 22, PX 24, PX 25, PX 26, PX 27, PX 29, PX 30, PX 31 and PX 46).

The qualitative difference in the opinions expressed by witnesses presented by intervenors and those of witnesses presented by appellees are so demonstrably different that any further discussion of them would simply belabor the obvious.[1]

4. Evidence of Safe Operations With Smaller Crews.

In concluding that the Arkansas crew size requirements do not contribute to safety of operations, the District Court relied heavily on evidence of comparable operations in other states with smaller crews.

In other cases involving issues similar to those present here, comparable emphasis has been placed on evidence of operations not subject to the challenged requirements. Thus, in *Weinberg v. Northern Pacific Railroad Company*, 150 F. 2d 645 (8th Circuit), involving the constitutionality of an ordinance requiring a fireman on 44-ton diesel yard engines, the Court relied to a large extent on the experience of other railroads in operating this type of equipment without a fireman. Similarly, in *City of Shreveport*

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[1] Appellants suggest that the omission from this litigation of the Arkansas statute relating to passenger service is "illogical at best" (Brief, fn. 4, p. 10). The fact is that passenger service crew requirements clearly establish the redundancy of the employees required in freight service. Engine crews in passenger service consist of two employees (engineer and fireman) in contrast to the three (engineer, fireman and head brakeman) required in other classes of road service (A. 752; PX 19, p. 38). Thus, two employees in passenger service perform the entire lookout function while appellants contend that three individuals are needed for this purpose on freight trains. Moreover, firemen in passenger service do not perform any mechanical duties while the train is moving (PX 111). This procedure corresponds to that observed in freight service in other states where the fireman's position has been abolished, with the engineer taking care of malfunctions while the train is stopped. It is obvious, therefore, that manning requirements in passenger service and the manner in which the lookout and mechanical functions are handled completely support the findings and conclusions of the lower court.

v. Shreveport Railway Company, 37 F. 2d 910 (C. A. 5, 1930), the Court held that the ordinance requiring two men on street cars, "in light of the proven experience of other cities, is arbitrary and amounts to taking plaintiff's property without due process of law". Perhaps the primary authority on the significance of such evidence is *Southern Pacific Company v. Arizona*, 325 U.S. 761, where this Court invalidated an Arizona statute regulating the length of freight trains. With respect to the paramount issue of safety this Court relied primarily on the operating and safety experience of railroads in Arizona subject to the statute and railroads in other states which operated without such statutory limitations. This Court concluded, on the basis of such evidence, that the statute had "no reasonable relation to safety" (p. 775). The record in the present case permits the same type of comparison and strongly supports the District Court's conclusion that the statutory requirements at issue make no contribution to safety of operations.

This comparative evaluation is greatly facilitated by the significant changes in crew size which have occurred on the American railroads since May of 1964 under the Award of Arbitration Board No. 282. That Award, applicable to virtually every major American railroad, has resulted in the elimination of a majority of the firemen's positions in road and yard service (PX 109, p. 16; A. 234, 989). Special Boards of Adjustment, functioning pursuant to the Award, and agreements made pursuant to the provisions of the Award, have also reduced the number of brakemen and helpers used on crews in road and yard service (Exhibits 1 to 6, inc., to PX 78). During this same period of time, extensive data has been accumulated by the Interstate Commerce Commission with respect to safety of railroad operations. This data permits a comparison of the safety of railroad operations on a year-to-year or a month-to-month basis, as well as a comparison

of the relative safety of operations in the various states (PX 109; A. 234, 971-1005). The data thus available, when properly related to changes in crew size, permits conclusions to be drawn as to the relationship between given crew sizes and safety of operations. Extensive data of this nature appears in the record and shows beyond a doubt that the requirements of the Arkansas statute resulting in a crew of six employees in freight and yard service make no contribution to safety of operations.

To refer briefly to the basic data, the evidence shows that casualties arising from train and nontrain accidents were almost 5 percent lower in 1965 than in 1964 and were below the level of casualties in 3 out of the 4 preceding years (PX 109, p. 6; A. 234, 978). During this period of time when casualties from train operations were declining, other data shows that the percent of freight and yard operations conducted without firemen was increasing, from 20 percent in 1964 to 47.6 percent in 1965 (PX 109, p. 6; A. 234, 978). Other data, including casualty rates computed on the basis of train miles,[1] illustrate the same trend of declining casualties and rising proportions of service conducted without firemen (PX 109,

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[1] Appellees' evidence relating to casualty and accident rates is principally in terms of train miles (A. 206-08). Since the basic purpose of railroad transportation is the movement of trains between terminals and in yards, the use of train miles to determine casualty and accident rates is obviously most appropriate (A. 206-08). Casualties per train mile indicate precisely the incidence of injuries arising from the basic activity of the railroad industry. Appellants utilize a statistical device which involves the use of man hours for all railroad employees, including executives, minor officials, clerks, stenographers, totaling 128 separate employee classes (A. 530). These man hours are divided into casualties accruing primarily to the relatively few employees who operate trains (A. 530). The resulting rate is admittedly subject to fluctuations due to changes in employment levels for all of the 128 classes of employees and obviously cannot indicate anything meaningful regarding the relative safety of train operations (A. 530-31).

pp. 7-9). Obviously, the decline in casualties accompanying the abolishment of firemen's positions is most precise proof of the fact that the firemen required by the Arkansas statutes do not contribute to safety of operations.

Additional proof of the basic fact that the crew size requirements of Arkansas statutes do not promote safety of operations appears from a comparison of casualties arising from train operations in Arkansas and in other states. With respect to such casualties, Arkansas experienced an increase of 2.5 percent during the 12-month period ended June 30, 1965, while data for the United States as a whole showed a decline of .8 percent (PX 109, p. 20; A. 234, 994). During this period of time 39.2 percent of freight and yard operations in the United States as a whole were conducted without firemen (PX 109, p. 20; A. 234, 994). In Arkansas, of course, the statutory requirements resulted in the continued presence of firemen on diesel locomotives and the presence of three brakemen and three helpers in freight and yard service.

In the period from June 30, 1965, to June 30, 1966, casualties in train and train service accidents declined both in Arkansas and in the United States as a whole (PX 109, p. 20; A. 234, 994). During this period of time, 52.1 percent of freight and yard operations in the United States were conducted without firemen in contrast to the Arkansas situation (PX 109, p. 20; A. 234, 994). Other evidence shows that train crews in other states typically consist of fewer than the three brakemen required by the Arkansas statutes and that yard crews generally have fewer than the three helpers required by the Arkansas statutes (PX 19, pp. 57, 238). Thus the trends for Arkansas and the United States as a whole, taking the crew size differences into consideration, clearly destroy the predicate upon which the Arkansas statutes must be justified.

Data published by the Interstate Commerce Commission also permits comparisons between railroad operations in Arkansas and in states adjoining Arkansas. In the adjoining states (Louisiana, Mississippi, Missouri, Oklahoma, Tennessee and Texas) there were no statutory requirements with respect to the size of crews used in freight and yard service during the period covered by the data in question. The award of Arbitration Board No. 282 and the awards of Special Boards of Adjustment thus operated to reduce the size of the crews in the adjoining states after May 7, 1964 (A. 227). Generally the crews manning freight trains in such adjoining states consisted of four employees (engineer, conductor and two brakemen) and in yard service the typical crew consisted of an engineer, a foreman and two helpers (PXs. 1-17, 32-42, and 90). In contrast, the Arkansas statutes required crews consisting of six employees. With respect to safety of operations the available data shows that from June 30, 1964 to June 30, 1966, a 24-months period during which the award of Arbitration Board No. 282 was in effect, the trend of train accidents in Arkansas and in adjoining states was approximately the same (PX 109, p. 21; A. 234, 995). With respect to casualties in train and train service accidents this same pattern of comparability exists. Thus from June 30, 1964 to June 30, 1965, a 12-month period during which the Award of Arbitration Board No. 282 was in effect, casualties from train and train service accidents decreased by 4.4 percent in the states adjoining Arkansas and increased by 2.5 percent in Arkansas. In the following 12-month period from June 30, 1965 to June 30, 1966, casualties increased by 1.1 percent in the adjoining states and decreased by 5 percent in Arkansas (PX 109, p. 21; A. 234, 995). Thus despite the substantial differences in crew size in freight and yard operations as between Arkansas and the six adjoining states, the casualty experience for Arkansas and the adjoining states was approximately the same.

Further support for the findings of the District Court appears in the comparative data relating to the Arkansas operations of the appellee railroads and their operations in other states. With respect to casualties in train and train service accidents from 1961 to 1966, there was a reduction of 13.1 percent in Arkansas and 16.1 percent in other states through which the appellee railroads operate (PX 109, p. 29; A. 234, 1004). From 1964 to 1965 there was a reduction in the casualty rate for employees in train and train service accidents in Arkansas and a slight increase in other states (PX 109, p. 29; A. 234, 1004). In the following year, however, the casualty rate increased in Arkansas and declined in other states (PX 109, p. 29; A. 234, 1004). Certainly if there is any support for the proposition that the six-man crews in Arkansas provide safer operations than the four-man crews used by the appellee railroads in other states, it cannot be found in the reported data with respect to train and train service accidents and casualties arising therefrom. On the contrary, the relevant data shows beyond a doubt that the Arkansas size crews do not result in safer operations than the four-man crews which the appellee railroads utilize in the other states in which they conduct their freight and yard operations.[1]

[1] It is indisputable that these comparisons between Arkansas railroad operations and operations in other states are proper. Operations in Arkansas constitute an integral part of the interstate network of railroads with basically similar operating characteristics. Track and roadbed is standard from state to state in weight and other characteristics (PX 30). The same is true of signal protection (PXs 27, 28, 29, 37, 41 and 77) and the standard code of operating rules provides national uniformity in that area (IX 36). Communication facilities are alike from state to state (PX 77). Equipment moves throughout the country on an interchange basis and motive power is basically the same on the various railroads (PXs 22, 23, 24 and 26). Train studies show that the consist and operating characteristics of trains are the same in Arkansas and adjacent states except for the size of the crew (PXs 1-17, 33-42 and 75-76). Moreover testimony of operating officers establishes comparability in all essential respects (A. 119-20, PXs 25, 32, 46, 77 and 90). Apparently the Brotherhoods agree

In an effort to establish a positive relationship between the crew requirements of the Arkansas statutes and safety of operations, appellants argue that the elimination of firemen from engine crews pursuant to the award of Arbitration Board No. 282 has had an adverse effect on railroad safety (Brief, pp. 49-52). Much of the argument is based on the claim that accidents have increased and that the absence of firemen is responsible for this trend. It must be emphasized first that the reported data with respect to accidents shows an increase on a year-by-year basis since 1961 and is not limited to the period of time which has elapsed since the effective date of the award of Arbitration Board No. 282. Consequently, the reported increase in train accidents, whether real or imagined, cannot be attributed to changes in crew size pursuant to the provisions of the award. The significant fact, however, is that increases in the number of reported train accidents since 1961 have been accompanied by a decline in the number of casualties resulting from such accidents (A. 208-09). These parallel developments strongly suggest that the reported statistics do not in reality reflect an increase in accidents arising from the operation of trains but merely reflect an increase in the number of mishaps falling within the reporting requirements of the Interstate Commerce Commission. This is most clearly illustrated by the data which shows that reportable train accidents increased from 4,324 for the 12-month period ended August 31, 1962, to 6,523 for the 12-month period ended August 31, 1966, while total casualties in train accidents declined during the same period of time from 1,584 to 1,157 (PX 109, p. 1; A. 234, 972).

Other data supports the conclusion that reportable train accidents have increased as a result of factors unrelated

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since their principal witnesses (Messrs. Homer, Clark and Wilkerson) relied upon the results of and the nature of operations in the nation as a whole in attempting to justify the Arkansas crew size requirements.

to the safety of train operations. One factor contributing to this result has been the constant dollar amount of damage which makes a train accident reportable. During the period covered by this data (1961-1966) an accident was reportable as a train accident if it involved damage of at least $750.00 to railroad equipment, track or roadbed (A. 210-11). During the period of time that this dollar amount had remained constant the value of railroad equipment increased due to new and more costly cars and other rolling stock (A. 211-12; PX 109, p. 3; A. 234, 972). The rates of pay for employees engaged in repairing damage have increased substantially and the relative complexity of new equipment has increased the cost of making repairs necessitated by collisions or derailments (A. 210-11). Thus, since 1961 mishaps previously not reportable have become reportable with increasing frequency merely because of the rising costs of making repairs, the increasing complexity and value of railroad rolling stock, and the constant amount of $750 which makes such a mishap reportable as a train accident. The apparent increase in train accidents is also explained in part by the fact that since 1961 there has been a decline in the amount of passenger service operated by the railroads and an increase in the amount of freight and yard service (PX 109, p. 5; A. 234, 977). Train accident rates in passenger service have traditionally been extremely low while the rates in freight and yard service have been relatively higher (PX 109, p. 4; A. 234, 976). Consequently, the change in the distribution of railroad service between passenger, freight and yard service would itself produce an increase in train accidents without any change in the frequency of such mishaps in the various classes of service (A. 212-13). All of these circumstances indicate that the trend of train accidents is not at all related to changes in crew size.

This conclusion is supported by an analysis of the train accident experience of 67 railroads operating vary-

ing percentages of their service without firemen. These railroads, parties to the award of Arbitration Board No. 282, operated 96.1 percent of the train miles of all Class I Line-Haul railroads and thus constitute the bulk of the railroad industry (A. 206). Available data indicates the percentage of freight and yard service which these carriers operate with and without firemen. During the period from June 30, 1964, to June 30, 1965, 35 of the 67 carriers, operating 66.4 percent of their freight and yard service without firemen experienced an increase in train accidents of 10.2 percent while the 32 carriers operating only 37 percent of their freight and yard service without firemen experienced an increase of 33 percent in train accidents (PX 109, p. 11; A. 234, 984). Obviously, this data completely vitiates the efforts to show that train accidents have increased because of the elimination of firemen pursuant to the provisions of the award of Arbitration Board No. 282. Any doubts on this issue were resolved by the District Court when it found that crew reductions pursuant to the Arbitration Award did not detract from safety of railroad operations (A. 1202).

Appellants also argue that data regarding collisions is particularly pertinent and that "the correlation between the increase in rate of collisions and the reduction of the crew as a result of Arbitration Award 282 is compelling" (Brief, p. 52). Since collisions are included in the data pertaining to train accidents, the preceding discussion of the non-safety factors responsible for changes in the number of mishaps subject to reporting requirements is applicable. The available evidence, moreover, shows conclusively that the roads operating with reduced crews had a better safety record in this regard than those roads operating predominantly with firemen. Collision rates for the two year period June 30, 1964 to June 30, 1965 increased 31.5 percent on the roads operating most of their service with firemen and only 17.9 percent

on those roads operating predominantly with no firemen (PX 109, p. 12; A. 234, 985).

The superior safety record of the roads operating predominantly without firemen is firmly established by the evidence regarding casualties, which shows a decline from June 30, 1964 to June 30, 1965 and a further decline during the most recent 12 month period (PX 109, p. 13; A. 234, 986). For the carriers operating only 37 percent of their freight and yard service without firemen, there was also a decline in casualties during this period of time but the decline in the most recent 12 months was less than it was for those carriers operating over two-thirds of their freight and yard service without firemen (PX 109, p. 13; A. 234, 986).

We emphasize in this connection that the District Court heard the witnesses who presented this safety evidence and was in a position to evaluate their conflicting claims. The Court determined that crew reductions pursuant to the award of Arbitration Board No. 282 did not impair safety of operations, that "freight trains have been operated and switched throughout the country for the past number of years with crews of five men or less and that the operations have been conducted with safety" (A. 1202, 1203).

These findings, we submit, are clearly correct and are unimpeachable.

The experience of the railroads in the conduct of operations with reduced crews following the Award of Arbitration Board No. 282 was analyzed in great detail in the Report of the National Joint Board created by Arbitration Board No. 282. Part 4 of the Report of the National Joint Board discusses studies of safety of operations in freight and yard service with and without firemen (PX 79, pp. 64-103). It is particularly significant that the studies made by the Brotherhood of Locomotive Engineers dis-

closed that it was the consensus of its officers, representatives, and members that the elimination of firemen jobs had not adversely affected the safety of railway operations (PX 79, pp. 18-19). Thus, in January of 1966, the Brotherhood of Locomotive Engineers, representing the members of the engine crew who continue to work in freight and yard service in the absence of firemen, concluded that there was no evidence of any adverse effect on safety of operations resulting from the elimination of firemen positions. We emphasize the fact that the engineers, as the remaining members of the engine crews in freight and yard service, have a most immediate and direct interest in safety of operations. When the report in question was made the engineers had had an opportunity to study such operations over a period of almost two years and the organization undertook to make its study representative of railroads throughout the United States (PX 79, pp. 124-126).

The conclusions stated by the Brotherhood thus support the finding of the Court that firemen in diesel service do not contribute to safety of operations. As the Grand Chief of the Brotherhood stated the matter in a letter to the Chairman of the Committee on Commerce of the United States Senate, "engineers are now efficiently and safely moving their trains over the road" (A. 506-08; PX 79, p. 14).[1]

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[1] Appellants seek to minimize these crucial admissions and evaluations by referring to the Report of the National Joint Board as follows:

> "The railroads also point to a report of representatives of the railroads and the Brotherhood of Locomotive Engineers which relies on a 1965 assertion by an ICC official that the Commission had investigated no accident in which it found that the absence of a fireman was a contributing or proximate cause. PX 79, p. 64" (Brief, fn. 36, p. 49).

Contrary to this description, the Report of the National Joint Board shows that "the members of the Joint Board and their staffs have made exhaustive studies of all available data" in ap-

This is overwhelming evidence, we submit, of comparable and safe operations in other states with smaller crews than those required by the Arkansas statutes.

5. Reports, Findings and Awards of Public Boards, and Commissions Relating to Railroad Crew Size Required for Safe Operations.

On the crucial issue of the relationship, if any, between safety of operations and the requirements of the Arkansas statutes, there is an abundance of informed and expert authority. In recent years, the manning of trains in the railroad industry has been the subject of repeated investigations and studies culminating in decisions or recommendations of the most immediate and direct relevance in deciding whether the crew size required by the Arkansas statutes promotes safety of operations.

A circumstance of paramount importance in connection with these reports and awards is the identity of parties and issues. In each of the proceedings eventuating in such reports and awards, the railroad labor organizations, which are appellants here, were also involved as were the appellee railroads. The labor organizations were afforded every opportunity to present evidence, cross-examine witnesses and to argue their claims regarding the size of

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praising the effect of crew size reductions on safety of operations (PX 79, p. 64). The Brotherhood of Locomotive Engineers refers to the material upon which it based its conclusions as follows:

> "Independent studies have been made, and material furnished the undersigned by General Chairmen, Local Chairmen and Secretary-Treasurers of numerous BLE Divisions throughout the United States and Canada, as well as reports submitted by individual engineers and firemen, members and non-members alike, including former carrier officials who are members of the BLE, have been screened and carefully analyzed". (PX 79, Supp. Rep. of BLE).

The appellants' statement that the Report of the National Joint Board is based on the statement attributed to the Chairman of the Interstate Commerce Commission is thus an obvious and gross distortion of the facts.

road and yard crews. Moreover, the crucial issue in each proceeding was the effect on safety of operations of the crew size proposals considered by the various tribunals. The resulting decisions thus not only constitute prior determinations of the crucial issues involved here but also involved the same parties. In many respects these prior decisions comprehend all of the basic requirements for application of the doctrine of res judicata as that doctrine has evolved with respect to quasi-judicial or administrative proceedings. *United States v. Utah Construction and Mining Co.*, 384 U.S. 394 (1966). As a minimum they are entitled to substantial weight.

a. The Report of the Presidential Railroad Commission.

Shortly after diesel locomotives were introduced in freight and yard operations on the American railroads, the Brotherhood of Locomotive Firemen and Enginemen succeeded in obtaining an agreement from the nation's railroads requiring the use of a fireman on all diesel locomotives, with a few minor exceptions (PX 19, p. 36). This requirement continued to be applicable as the nation's railroads gradually converted from steam power to diesel power. As experience with diesel locomotives accumulated, however, it became apparent that the use of firemen on all diesel locomotives was entirely unjustified and that the employee thus required did not serve any useful purpose as a member of the engine crew (PX 19, p. 36). Accordingly the railroads, including all of the appellees in the present litigation, served a notice on November 2, 1959, under the provisions of § 6 of the Railway Labor Act, which proposed the elimination of the rules and agreements requiring the use of firemen on other than steam locomotives in freight and yard service (PX 19, p. 287). Subsequently the appellant organizations served so-called counter proposals which were intended,

among other things, to preserve the requirement that a fireman be used on all locomotives (PX 19, p. 301). The railroads and the labor organizations were unable to agree upon a disposition of the notices thus served, but did agree to submit the issues raised by these notices to a Presidential Railroad Commission. On November 1, 1960, President Eisenhower, by executive order, created the Commission and appointed its members (PX 19, pp. 279-280).[1] Hearings were held before the Commission from February 6, 1961, to November 14, 1961, consisting of a total of 96 hearing days. The transcript consisted of 15,306 pages, 36 witnesses were called by the carriers and 43 witnesses were called by the labor organizations (PX 19, p. 16). The public members of the Commission also made extensive inspection tours of road and yard operations on the American railroads and were assisted by a substantial technical staff (PX 19, p. 16). The scope of the Commission's investigation and the intensive efforts made to inform the Commission with respect to the issues before it are indicated by the following from the Commission's report:

> "Never in American history have railroad labor relations been more thoroughly examined or more fully ventilated than during this past year. The effort has entailed the expenditure of much time, exertion, and money. The minds of many informed persons have been brought to bear upon the problems involved" (PX 19, p. 10).

The Commission made its report in February 1962. Basically it was the Commission's conclusion that firemen

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[1] Secretary of Labor Mitchell was appointed as the Chairman of the Commission by President Eisenhower. Subsequently Chairman Mitchell resigned and was replaced by Chairman Rifkind, who was appointed by President Kennedy. Chairman Rifkind was the presiding officer of the Commission during virtually all of the hearings and continued as such until after the Commission had filed its report (PX 19, p. III).

were unnecessary on diesel locomotives in freight and yard operations on the American railroads. In reaching this conclusion the Commission accorded governing weight to the question of the relationship, if any, between the presence of the firemen on diesel locomotives and the safety of railroad operations. It is clear from the Commission's report that the safety issue was the paramount issue upon which the parties focused and it was considered to be the crucial issue underlying the Commission's conclusions.

Describing the position taken by the parties the Commission stated:

> "The Carriers assert that they are burdened with the employment of firemen who perform no useful or necessary functions. The Carriers state that firemen's duties vanished with the elimination of steam power; that firemen no longer have any distinctive duties and do not constitute a separate or distinguishable craft; that whatever firemen do of a useful character can and has been performed by other employees; and that firemen contribute little if anything to safety of railroad operations. They ask that they be given the right to determine whether firemen shall be assigned to engine crews. They assert that their interest in safety and efficiency will protect the interests of other employees and the public.
>
> "The Organizations, in contrast, emphasize the team aspect of road and yard operations and assert that the fireman is an essential part of this team. They argue that railroad operations can be made safe for the public and railroad employees only if there are sufficient men in a crew to look out for all hazards, perform every operation necessary to getting a train over the road, provide continuous communications, and share the work burden. The Organizations

strongly emphasize the fireman-helper's mechanical duties in the maintenance of power and his contribution as a necessary left-hand lookout in both road freight and yard operations. They argue that the public nature of the service provided by railroads and the public interest in safe railroad operations require that railroad management not be permitted unilateral discretion in determining whether a fireman is needed" (PX 19, p. 37).

For purposes of its discussion of the firemen issue the Commission outlined its basic approach as follows:

"The testimony, argument and exhibits on the diesel fireman issue consumed more time in the hearings and filled more pages of the record than any other issue before the Commission. A review of this extensive record indicates that there are several major facets involved in determining the essentiality of the fireman-helper's role in the safe and efficient operation of diesels: (1) the lookout function in freight and yard service; (2) the mechanical function in freight and yard service; (3) relief of the engineer in both types of service; (4) the findings of other tribunals dealing with some aspects of the firemen's role; (5) foreign experience related to the issue; and (6) the essentiality of firemen as a future source of engineers" (PX 19, p. 37).

The Commission discussed each of these six areas in great detail, stating its conclusions with respect to each as follows:

"1. **The Lookout Function.**

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"The conclusion of this review of the fireman's lookout function is that it is not essential to the safe and efficient operation of road freight and yard diesels. On freight diesels, the fireman has no special

qualifications to perform the lookout function as distinguished from other members of the crew. Therefore, he possesses no unique or traditional 'craft right' to discharge this function. On yard diesels, his function in passing signals is minimal. In view of the slower nature of yard operations, which proceed under signals from members of the ground crew, the precautions taken by other members of the crew should suffice for the safety of men and equipment. The only exception to this conclusion is in those rare occasions when the yard engineer is disabled while the diesel is in motion. We shall consider this exception later under the section dealing with 'relief of the engineer'" (PX 19, p. 40).

"2. **The Mechanical Function.**

* * * * * * * *

"The conclusion of this review of the mechanical duties now performed by firemen-helpers on road freight and yard diesels is that they involve a small proportion of the total time on duty, are relatively minor, and are not essential to safe operation. The infrequent minor malfunctions which do occur can be handled by the engineer. If they are more serious, the services of skilled maintenance personnel called to handle the emergency will still be required, as at present" (PX 19, p. 43).

"3. **Relief of the Engineer.**

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"When the engineer needs temporary or emergency relief, the locomotive can be stopped in road service with minimal delay in the absence of a fireman, and in yard service with practically no delay. In the event of an emergency created by the death or illness of the engineer in road freight service, any member of the train crew riding in the cab (such as the head

brakeman) can easily stop the train. The infrequency of these instances cited in the safety award applications (less than 1 a month over the whole nation) is not justification for retaining firemen-helpers permanently on road freight trains (PX 19, p. 43)."

"4. **Findings of Other Tribunals.**

"The firemen issue specifically before the Commission has not been considered by other emergency boards appointed under the Railway Labor Act. However, three emergency boards and one arbitration board have considered organization proposals to add additional engine crew members on grounds of safety or efficiency. These were uniformly rejected. For example, Emergency Board No. 70 rejected in 1949 the contention that safety considerations demanded an additional fireman to perform engine-room work on passenger trains which under the 'watching rule' required that the fireman be in the cab at all times. The Board further noted that lookout functions in road freight service could be and regularly were performed by the head brakeman while the fireman was either present in or absent from the cab. Arbitration Board No. 140, dealing in 1954 with another aspect of the issue, asserted that there was little need for the fireman on 'watching rule' passenger trains to perform inspection or mechanical work in the engine room while the train was moving. The Board added that 'in any event, such work is not exclusively that of a fireman'" (PX 19, p. 44).

"5. **Foreign Experience.**

"Evidence of experience in other countries was introduced by the Carriers to support their case for the removal of the fireman-helpers, but this was characterized by the organizations as irrelevant to

American employment standards and railroad operating characteristics. The fact that diesel and electric-powered freight and yard trains are operated safely and efficiently without firemen in most other countries cannot be ignored (PX 19, p. 44).

"The Canadian situation is of special significance. After extensive hearings and inspection trips, a Royal Commission reported on December 18, 1957, that firemen were not needed on freight and yard diesels on the Canadian Pacific Railroad. Despite the organizations' contention that even this experience should be disregarded, we cannot be unmindful of the Royal Commission's conclusions and the subsequent agreements which the BLF&E signed with the Canadian Pacific and later with the Canadian National Railroad. There is interchangeability of trains at certain points in our common border with Canada, the operations are not greatly dissimilar (as European operations might be), the same labor organization represented Canadian firemen as in the present proceedings, and it reached agreements which should not be treated as irrelevant to this case. Finally, while the protective provisions incorporated in these agreements coupled with declining traffic have limited the number of yard and freight trips run without firemen since 1957, no accidents traceable to the absence of the fireman have occurred on these trips" (PX 19, p. 45).

"6. **Future Source of Engineers.**

"Engineers have almost universally been promoted from the ranks of firemen who pass qualifying examinations. This fact does not in itself, however, compel the conclusion that the fireman's job should be retained. The engineer is a skilled and responsible operating employee, on whose shoulders rests the

> primary responsibility for the safe and efficient operation of the locomotive. Passenger firemen, who number over 6,000, would remain in any case, and be eligible for promotion to engineer positions on freight and yard diesels, as well as on passenger diesels" (PX 19, p. 45).

It is apparent from these excerpts that the Presidential Railroad Commission rejected each of the claims which the appellants have made in the present case regarding the role of firemen on diesel locomotives. Moreover, the same witnesses who appeared before the Commission on behalf of the labor organizations are also their witnesses here. Thus Messrs. Clark, Homer, Wilkerson and Pelton testified before the Commission and also at the hearings in the present case. A total of five witnesses from the appellee railroads appeared on behalf of the labor organizations before the Commission, relying on their experience with operations on the appellee railroads to support their claims (PX 19, pp. 319-324). Thus the operations involved in the present case were also intimately involved in the proceedings before the Commission.

Every opportunity was available to the organizations to convince the Commission of the substance of the claims advanced on behalf of firemen and every effort was made by the organizations to substantiate their claims. The Commission's rejection of these claims after lengthy and protracted hearings, investigations and studies is thus of the most immediate and substantial significance in the present litigation. It would be difficult indeed to conceive of a prior determination, more fully informed and more deliberately made, involving the same essential issue.

In addition to the issues relating to the role of firemen on diesel locomotives the notices which the parties had served and which were accordingly before the Commission also related to the size of train crews in road and yard

operations. The proposals which the carriers had served contemplated the elimination of various requirements and agreements regulating the number of brakemen to be used in road service and the number of helpers to be used in yard service. The organizations on the other hand proposed that not less than two trainmen be used on all crews in road service and not less than two helpers be used on all crews in yard service. Because of the multiplicity of rules and agreements relating to this subject and variations among the individual carriers the Commission decided that the issues thus raised should be remanded to the local properties for further negotiation and, in the event of failure to reach an agreement arbitration procedures should be used to fix the size of train crews in road and yard service. Commenting on the evidence before it, the Commission stated:

> "From the array of evidence, opinion, argument, and other information available to the Commission, including the observations made by the public members on their 'field' trips, we conclude (a) that there is *some* overmanning in road and yard service, under existing rules, regulations, and practices, but little undermanning; (b) that neither the amount of any overmanning or undermanning nor the precise circumstances in which they exist can be determined in this proceeding; and (c) that the extent of overmanning, while probably substantially less than estimated by the carriers, may nevertheless be a more significant problem for some railroads than for others. It appears that under present operating conditions the most typical and generally accepted crew consist, outside of passenger service, is a conductor (foreman) and 2 brakemen (helpers). An analysis of operations so manned, as compared with any proposal for a change in the consist of any crew of different size, should be useful in judging the merits of any specific proposal" (PX 19, p. 57).

It thus appears that the typical crew size on the American railroads, as well as the minimum crew size sought by the organizations was less than the crew size required by the Arkansas statute. The Commission was convinced, however, that changes in railroad operations had produced circumstances justifying reductions in the size of such train crews. It described the relevant evidence as follows:

> "There is no doubt that certain technological, operational, and traffic changes have tended to reduce the actual workload of employees in some classes or kinds of service. Among such changes may be cited the virtual disappearance of l. c. l. (less-than-carload-lot) freight, the reduction in the amount of local switching, diminution of passenger service, reduction of the train crew's paper work, the virtual elimination of 'doubling hills' and of helper services, Centralized Traffic Control, the use of the radio-telephone improvements leading to the detection and reduction of 'hot boxes', improvements in braking and signal systems, and modernization of classification yards" (p. 56).

It also noted that

> "[T]here are varying crew consists in road service on trains operated under similar conditions, as they pass from States having no 'full crew' laws into States having such laws. This is inferential evidence that the parties themselves consider that the difference in manpower requirements is not always warranted" (p. 56).[1]

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[1] One of the more candid appraisals of statutory crew consist requirements was made by the representatives of the Brotherhood of Railroad Trainmen and the Order of Railway Conductors and Brakemen in their dissent to the Report of the Presidential Railroad Commission. Referring to the quoted excerpt from the Commission's report, the Brotherhood Representatives stated:

> "While negotiated crew consist rules ordinarily do not require more than two brakemen, a third brakeman is some-

b. The Award of Arbitration Board No. 282

The findings of the Presidential Commission were not binding upon the parties and the organizations refused to accept them. Following further negotiations and extensive mediatory efforts, Congress on August 28, 1963, enacted Public Law 88-108. Pursuant to this legislation Arbitration Board No. 282 was created for the purpose of making a final and binding disposition of the manning issues covered by the Report of the Presidential Railroad Commission.

A particularly significant feature of the statute was its direction to the Arbitration Board to

> "[G]ive due consideration to the effect of the proposed award upon adequate and safe transportation service to the public and upon the interests of the carrier and employees affected" (Public Law 88-108, § 7 (a)).

Thus within the context and subject to the dominating consideration of safety, the Board established by Congress was required to decide whether or not firemen should be used on diesel locomotives and what changes, if any, should be authorized in the size of train crews in road and yard operations. The Board, therefore, was con-

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times required by statute in a few State 'full crew' laws. The Commission seeks to draw an unfavorable inference of excess manpower by comparing the crew size required by *negotiated consist rules* with the crew size required by some *State full crew laws*. The Commission does not explain just how a comparison between a negotiated consist rule and a State law constitutes, as it says, 'inferential evidence' that 'the parties themselves' recognize that 'this difference in manpower requirements is not always warranted.' Neither the carriers nor the organizations are a 'party' to a State law. The comparison is not an apt one nor does it indicate that excess manpower has been forced on the carriers by the employees. If the difference indicates anything, it would seem to indicate that if present manpower requirements are not always warranted it is not because of negotiated crew consist rules" (PX 19, p. 238).

cerned with virtually the same basic issues which confronted the District Court.

As was the situation before the Presidential Railroad Commission, the parties to the arbitration proceedings consisted of the labor organizations which are appellants in this case and the nation's railroads, including the appellees in this litigation. Two of the seven members of the Arbitration Board were nominated by the labor organizations and two of the members were nominated by the carriers. The three public members were appointed by the President of the United States. The Board began its public hearings on September 24, 1963, and issued its award on November 26, 1963. More than 40 witnesses were heard and the transcript consisted of some 5,000 pages (PX 20, pp. 2-4). All of the parties to the proceedings were given adequate opportunity to give evidence in support of their respective positions, to cross-examine witnesses and to argue the claims asserted by them.

Arbitration Board No. 282 concluded that firemen were not necessary for safe operations on at least 90 per cent of the assignments in freight and yard service. In reaching this conclusion, the Board considered the claims advanced by the organizations with respect to the services performed by firemen and concluded as follows:

> "2. The lookout function presently assigned to the fireman is also performed by the head brakeman in road freight service and by all members of the train crew in yard service. In the great majority of cases the lack of a fireman to perform the related functions of lookout and signal passing will not endanger safety or impair efficiency because these functions can be, as they are now, performed by other crew members.
>
> "3. A considerable portion of the mechanical duties now performed by the fireman is not absolutely essen-

tial to the safety and efficiency of road freight and yard operations. Those duties which are essential can be performed by the engineer while the locomotive is in service and by shop maintenance personnel at other times. These arrangements would not involve the assignment of fireman's duties to members of other crafts not presently authorized to perform them.

"4. Relief of the engineer by the fireman in road freight and yard operations is of critical importance only in the event that the engineer suddenly becomes incapacitated by death or illness. In road freight service the usual presence of the head brakeman in the cab obviates the need for a fireman in such an emergency. In yard service the normal lack of a third man in the cab is offset in part by the reduced speed of the locomotive, and will be offset still further by installing a deadman control in all yard engines, which our award requires as a condition precedent to the operation of such locomotives without a fireman.

"5. Both the Presidential Railroad Commission and Emergency Board No. 154 have concluded that in most instances firemen are not required in road freight and yard service. In addition, several emergency boards and one arbitration board in this country, although not dealing with precisely the same issue, have ruled adversely on related proposals by the BLF&E and the BLE" (PX 20).

Thus within the statutory requirement that it give due consideration to safety of operations it was the conclusion of the Arbitration Board that the functions which firemen perform in freight and yard service are unnecessary. We emphasize again the fact that the same functions found by the Arbitration Board to be unnecessary for safe

operations are claimed by the organizations in this case as the reasons why firemen are properly required on diesel locomotives under the Arkansas statutes. In all essential respects, the Arbitration Board and the Presidential Commission thus considered the same claims and the same evidence presented by the same witnesses on behalf of the same parties with respect to the same issues as the District Court was called upon to decide.

Arbitration Board No. 282 also considered the issues raised with respect to the size of train crews in road and yard service. On these issues the Board's award provided that crew size should be governed by the rules in effect immediately prior to the date of the award except that crew sizes differing from those specified in such rules could be established under the procedures defined by the award (PX 20, pp. 13-19). In road service the award provided that the carriers could propose changes in the number of trainmen used where existing rules required the employment of more or less than two trainmen except that in branch line service changes could be proposed without any such limitation. In yard service the award provided that changes in the number of helpers used could be proposed by either party without regard to the size of crews required by existing rules. Thus freight service rules requiring the use of two brakemen could not be modified under the terms of the award, but rules requiring the use of three brakemen were subject to modification. The award provided that if the parties were unable to agree upon proposed changes, Special Boards of Adjustment could be established to make final and binding determinations as to the size of crews to be used in road and yard service (PX 20, pp. 15-17). The award specified the manner in which the Special Boards of adjustment should be established and also provided a list of detailed guidelines which were to govern the Boards in their consideration of the proposals which were to govern the par-

ties. The very first guideline and one which received the most careful consideration of the Special Boards of Adjustment was "assurance of adequate safety" (PX 20, p. 17).

Thus Arbitration Board No. 282 determined that 90 per cent of the jobs of firemen in freight and yard service, which the Arkansas statutes perpetuate, are unnecessary for safe operations and that rules requiring three brakemen in road service or three helpers in yard service, similar to the requirements of the Arkansas statutes, were subject to change upon notice by the parties in interest and following consideration by Special Boards of Adjustment.

c. The Awards of Special Boards of Adjustment.

Pursuant to the provisions of the award of Arbitration Board No. 282 a large number of Special Boards of Adjustment were established on individual carriers. Each of these boards rendered final and binding awards which established the size of train crews in road and yard service. Representative awards, illustrating the careful consideration given by these boards to the question of safe operations in road and yard service with crews much smaller than those required by the Arkansas statutes, as part of the record (PX 80). Generally, these awards indicate that the neutral chairmen, appointed by the National Mediation Board, were most attentive to the guidelines prescribed by Arbitration Board No. 282. The individuals serving as neutral chairmen on these various Special Boards had had prior experience in the railroad industry as arbitrators, members of presidential emergency boards, or referees in proceedings before the National Railroad Adjustment Board. Their backgrounds, and their familiarity with railroad operations, as well as their prior experience in the determination of railroad labor disputes, provided these various individuals with

the knowledge and insights required for a proper consideration of the guidelines prescribed by Arbitration Board No. 282. Consequently, the substance of the awards is of substantial value in determining whether crews of a given size are adequate for safe operations in freight and yard service and the corollary question as to whether crews of a specified size are larger than necessary for safe operations in freight and yard service. The results of the awards of the many Special Boards of Adjustment, acting pursuant to the Award of Arbitration Board No. 282, are summarized in Exhibits 1 to 6 inclusive, to Mr. J. E. Wolfe's statement (PX 78).

In addition to the changes in crew size resulting from the awards of Special Boards, there have been many agreements accomplishing this same objective during the period of time in which the award of Arbitration Board No. 282 was in effect. These agreements generally were entered into by the parties in lieu of proceedings before Special Boards in accordance with the provisions of the Award of Arbitration Board No. 282. These were voluntary agreements and thus represent the considered judgment of the organizations as to the size of crew adequate for safety of operations in road and yard service. The evidence shows that the Brotherhood of Railroad Trainmen entered into agreements with the various identified railroads which involved 3,121 crews (A. 932). Under the terms of these agreements, 2,175 crews were reduced to one trainman while 926 crews were reduced to two trainmen (A. 932). Considering both the results of agreements and awards, three crews were reduced from a consist of four helpers in yard service to three helpers; 1,617 crews in all classes of service were reduced to two trainmen or helpers from prior requirements of five, four, or three trainmen or helpers; 6,100 crews were reduced to a consist of one trainman or helper while 88 were reduced to a consist of no trainmen or helpers (A. 932-33). A total of

7,808 crews were reduced in size under the Special Board's awards or pursuant to agreements. Virtually all of these crews were reduced to sizes smaller than the crew size required by the Arkansas statute (A. 932-33).

One of the most interesting features of the awards of these Special Boards is the absence, with one or two exceptions, of any proposal by the labor organizations involved, the Brotherhood of Railroad Trainmen, the Order of Railway Conductors and Brakemen and the Switchmen's Union of North America, to require the use of three brakemen in road service or three helpers in yard service. Under the Award of Arbitration Board No. 282, the organizations, of course, were free to propose crews of that size. Although virtually all of the rules in yard service which were subject to modification by the carrier proposals required two rather than three helpers in yard service, the disputes referred to the Special Boards were whether the requirement of two helpers should be retained or whether the requirement should be reduced to one helper or in some instances, no helpers (A. 933). In road service, the same situation prevailed. Although the organizations were free to propose the use of three brakemen where existing rules required two or less, no such proposal was made by any of the labor organizations in all of the many Special Board proceedings, with one or two exceptions (A. 933).

One other feature of the awards of these Special Boards which is of particular interest here relates to the guideline contained in the Award of Arbitration Board No. 282 involving switching across highways, streets, or other crossings. The guideline C (2) (h) required the Special Boards to give consideration to "the number of highway, street, road, railroad or other crossings or intersections to be protected" (PX 20, p. 17). Each Special Board of Adjustment in passing on proposals with respect to the size

of yard crews was required to and did take the quoted guideline into consideration. The general result of the awards, taking into account this guideline among others and giving particular consideration to assurance of adequate safety, was to authorize the carriers to reduce yard crews to a consist of a foreman and one helper (A. 933-36).

Since the Arkansas statute requires a crew of six, including a foreman and three helpers on yard crews which "do switching, pushing or transferring of cars across public crossings within the city limits of the cities" in which such crews operate, the repeated determinations by the Special Boards that such switching can be safely done by crews of a foreman and one helper is of particular significance.

d. Report of Emergency Board No. 70 and Award of Arbitration Board No. 140.

In addition to the definitive and comprehensive determinations discussed above there have been other tribunals which have had occasion to consider the function of firemen on diesel locomotives. Emergency Board No. 70 in a report issued on September 19, 1949, discussed the results of its investigation of a dispute between the nation's railroads and the Brotherhood of Locomotive Firemen and Enginemen. Basically the dispute concerned the manning of diesel locomotives and particularly the safety contribution made by firemen in the performance of the lookout and the mechanical functions. With respect to the lookout function Emergency Board No. 70 reported as follows:

> "In considering whether a rule should be adopted that a fireman should be in the cab at all times the Board is convinced, as was the 1943 Board, that the presence of the head end brakeman in the cab of freight diesels while the train is in motion satisfies

all possible safety requirements in freight service so far as manpower is concerned" (PX 110, p. 87).

"2. The head brakeman is as well qualified to perform the watching duties as the fireman. He receives the same training and instructions and passes the same examinations as firemen. The duty to observe and call signals and perform the other functions of a lookout, regardless of the presence of the fireman, has existed for decades. On handfired locomotives he perforce did most of the watching because the fireman's shoveling job kept him on the deck of the cab a great deal of the time" (PX 110, p. 85).

"Although it is urged that the duty of the head brakeman to look back to observe the train prevents his being an effective lookout forward the argument is not valid. If it were, it would similarly disqualify both the fireman and the engineer, for the duty to look back is common to all three. The fact that it is the primary duty of the head brakeman is not a sufficient difference upon which to ground a distinction. Further, the observation of the train, which can be done only on curves, never prevents making sufficient observation forward on slow-moving freight trains" (PX 110, p. 84).

Regarding the mechanical function Emergency Board No. 70 made the following findings:

"* * * it was maintained by the Brotherhood that an additional fireman should be assigned to perform engine room work on all road Diesels because of safety considerations, of the exclusive right of firemen to perform such work, and of the economical and efficient operations which would ensue. Upon analysis, these contentions are shown to be devoid of merit" (PX 110, p. 75).

Arbitration Board No. 140, appointed under the provisions of the Railway Labor Act to consider a dispute

over duties of firemen on diesel powered passenger trains, evaluated the firemen's so-called mechanical functions as follows:

> "The contention that firemen by craft rights do all work necessary to the production of power is not a valid one. The term 'production of power' was never employed in connection with firemen's work on steam locomotives. It appears to have been coined after the coming of the Diesel locomotive in an attempt to gain rights on the new type of power. The evidence shows, we think, the change from steam to Diesel power left little or nothing for the fireman to do. The attempt of the organization to make it appear that the duties of a fireman on the steam locomotive can be traced into the engine room of the Diesel locomotive simply cannot be accepted as a logical analyzation of the situation. The two types of power are not similar or analogous. The rights of the firemen on the Diesel locomotive are contractual and not traditional" (PX 111, p. 30).

e. Report of Public Service Commission of the State of New York.

In the 1959 the legislature of the State of New York directed the Public Service Commission to hold hearings and to report on the relationship, if any, between the crew consist laws in effect in New York and the safety of railroad operations. The railroads operating in New York and the five intervening labor organizations participated in the hearings, presented evidence, and cross-examined witnesses. The Commission concluded that the rigid manning requirements specified by the New York laws were unnecessary for safe operations, stating:

> "Unquestionably, the direct prescription by statutory mandate of the minimum number of employees which must be assigned in performing practically all

of the operations of an entire industry, such as are conducted by the railroads, constitutes unusual and extreme legislation. Indeed, no other industry has been subjected in this State to any such requirements fixed directly by legislative edict. Comparable industries such as the omnibus and trucking industries, the airlines and the rapid-transit system in New York City, operate under no such statutory enactments.

"The fundamental fault of the full crew laws is the hypothesis implicit therein that there is a reasonable relationship between the safety of the railroad operations and the prescription by legislative mandate, without any standard, guide or criterion whatever (other than the wholly arbitrary selection of specified numbers of railroad cars) of inexorable minimum crew requirements—requirements having universal application to practically all of the complex operations of the railroad industry carried on in this State over a network of 7,200 miles of road, no matter what the differences may be in such operations or in the conditions under which they are conducted. It is our considered judgment that, under such circumstances, there is not and cannot be any reasonable relationship between the laws of that variety and the safety of railroad operations.

* * * * * * *

"We can find no justification for continuing to single out the railroad industry and subject it to the unusual and extreme statutory mandates contained in the full crew laws in force in this State. The railroads are vitally essential to the commerce and economic welfare of our State and nation and should not be subjected to unnecessary and burdensome statutory requirements, the continued need for which cannot be justified by any reasonable tests" (PX 112, pp. 52-55).

These conclusions are obviously relevant and significant in the present case since the full crew laws in New York at the time of the Commission's report imposed much the same requirements as those imposed by the Arkansas statutes.

f. Royal Commission on Employment of Firemen on Diesel Locomotives in Freight and Yard Service on the Canadian Pacific Railway.

The Royal Commission was created in 1957 under circumstances in Canada similar to those existing when Arbitration Board No. 282 was established by Congress. The Brotherhood of Locomotive Firemen and Enginemen refused to permit the Canadian Pacific Railway to operate any freight or yard trains without firemen and called a strike over the issue. The Royal Commission was created to resolve the manpower issues in dispute. It found that firemen were not necessary for safety of operations in either freight or yard service, stating:

> "Accordingly, from the standpoint of the contentions put forward on behalf of the Brotherhood [the BLF&E], taken individually or considered as a whole, which it contends would be the proper approach, we are of opinion that firemen are not required on diesel locomotives in either freight or yard service on the Canadian Pacific Railway. Their functions have either totally disappeared, as in the case of the production of power, mechanical assistance and inspection or are a mere duplication of what is discharged by another or others, as in the case of the lookout functions performed by the head-end trainman and the engineman" (PX 113, p. 18).

The evidence in this case shows that the Canadian Pacific operates the same type of equipment as that operated by the appellee railroads (A. 727). Accordingly, the determination by the Royal Commission is pertinent and relevant here.

These highly persuasive evaluations of the proper crew size for safe railroad operations fully support the findings and conclusions of the District Court.

6. The Burdens Imposed by the Arkansas Statutes.

The evidence shows that the Arkansas statutes entail an annual cost burden, which would be eliminated in the absence of the statutory requirements, of approximately $7,600,000.00. For the individual railroads involved, the 1965 costs of maintaining the redundant firemen, brakemen and helpers required by the Arkansas statutes were as follows:

Missouri Pacific Railroad.	$3,525,174.00	(PX 85, p. 4)
St. Louis Southwestern Ry.	$2,198,954.00	(PX 43, p. 4)
Chicago, Rock Island and Pacific Railroad	$ 801,425.00	(PX 88, p. 5)
St. Louis-San Francisco Ry. Co.	$ 702,684.00	(PX 81, p. 8)
Kansas City Southern Ry Co.	$ 389,603.00	(Exhibit D to PX 86)

The costs thus incurred in 1965 understate the amount of the present burden. Since 1965, there have been increases in rates of pay which would automatically increase the wage costs attributable to the unnecessary employees required by the Arkansas statutes (A. 297-98).

As the preceding discussion shows, the firemen and brakemen whose annual wage costs amount to approximately $7.6 million dollars are wholly unnecessary for safety of railroad operations. These employees make no contribution at all to any proper objectives which the state may legitimately seek to achieve through the exercise of

its police power. It is elementary that legislation under the guise of a safety measure which compels the employment of individuals who do not promote safety violates the due process clause of the Fourteenth Amendment. In *Pennsylvania Railroad Company v. Driscoll*, 330 Pa. 97, 198 Atl. 130 (1938), the Supreme Court of Pennsylvania concluded that a statute requiring a six-man crew (engineer, fireman, conductor, and three brakemen or helpers), had no fair or reasonable relationship to safety. With respect to the relevance of the cost burden imposed by the statute, the Court stated:

> "* * * Safety is a relative term. Absolute safety can never be insured, and comparative safety is attended by certain necessary elements of disadvantage which must enter the comparison. One of these elements is cost, and it must be considered.
>
> "Cost reflects not only the expense of compliance in dollars and cents to the railroad but, more important, bears on the ultimate expense to the public at large which uses its facilities. The cost of complying with state laws enacted to promote safety is an important element in determining whether the law is arbitrary and unreasonable" (p. 135).

The cost of compliance must be compared with the benefit to be achieved, as stated by this Court in *Lehigh Valley Railroad Co. v. Board of Public Utility Comm'rs*, 278 U.S. 24 (1928):

> "This is not to be construed as meaning that danger to the public will justify great expenditures unreasonably burdening the railroad, when less expenditure can reasonably accomplish the object of the improvements and avoid the danger. If the danger is clear, reasonable care must be taken to eliminate it and the police power may be exerted to that end. But

> it becomes the duty of the Court where the cost is questioned, to determine whether it is within reasonable limits'' (p. 34).

Here the cost burden is obviously an intolerable and completely unjustified exaction imposed upon railroad operations in Arkansas. There is no balancing contribution which the employees in question make to safety of operations which can be urged as justifying the exaction in any respect.

In the prior litigation involving the Arkansas statutes this Court noted the relevance of the burden imposed by the legislation in question, stating:

> ''While costs of complying with State laws enacted to promote safety is an element properly to be taken into account in determining whether such laws are arbitrary and repugnant to the due process clause of the 14th Amendment, there is nothing alleged in that respect which is sufficient to distinguish 'this' case from those in which we have upheld the laws in question'' (283 U.S. 249, 255).

With respect to the matter of costs, there is much to distinguish this case from those in which this Court previously upheld the laws in question. The prior cases involved only the question of the burden imposed upon the railroads by the statutory requirement of a third brakeman in road service and a third helper in yard service. The three-judge District Court which heard the *Norwood* case on remand from this Court noted that the third brakeman required by the Arkansas statutes was shown to impose a cost of $76,980.00 when the validity of the statutes was first put in issue (*Missouri Pacific R. Co. v. Norwood,* 13 F.Supp. at 34). When the requirement of three helpers on yard crews was challenged in *St. Louis, Iron Mountain & Southern Railway*

Co. v. State of Arkansas, 240 U.S. 519 (1916), the cost of the extra switchman was shown to be an annual amount of $54,800.00 (13 F.Supp. at p. 34). When the statutes were challenged again in *Missouri Pacific R. R. Co. v. Norwood,* 283 U.S. 249, the cost of maintaining a third brakeman on road freight crews was shown to be $277,975.00 and the third switchman cost was shown to be $203,891.00 (13 F.Supp. at p. 34). No claim was made in the prior litigation that the fireman on steam locomotives was an unnecessary or redundant employee. Thus the entire burden of maintaining firemen on engine crews, shown to be $3,770,949.00 (PXs 43, 81, 85, 86 and 88), is an increase in the cost burden which has developed since the prior cases were decided. This alone is sufficient to distinguish the present case from the prior litigation insofar as the cost burden is concerned. It is also apparent that the cost of maintaining a third brakeman on road freight crews and a third helper on yard crews has increased appreciably since the time of the prior decisions. In contrast to the $54,800.00 cost for a third helper in 1914 the Missouri Pacific shows a 1965 cost burden of $462,347.00 (PX 85). The third brakeman whose employment was shown to involve a cost of $76,980.00 in 1914 now costs the Missouri Pacific $1,279,035.00 per year (PX 85). In contrast to the total cost of approximately $481,000.00 involved in the 1929 litigation the cost burden which the Missouri Pacific presently must bear because of the Arkansas statutes is $3,500,000.00 (PX 85).

This 1929 cost represented 3.94% of the Missouri Pacific's net income for that year (PX 85, p. 5). The cost of compliance for the year 1965 ($3,523,174) represents 26.25% of the Company's net income for that year (PX 85, p. 5). Thus the absolute cost has increased (largely as a result of wage increases and the requirement of a fireman who is unnecessary now but was needed at

the time of *Norwood*) by over 600%. At the same time, while considerably less than 25% of Missouri Pacific's operations are in Arkansas (PX 67, p. 44), compliance with these statutes in this state requires expenditure of over 25% of its net earnings derived from operations in its entire 11 state system.

Viewed either relatively or absolutely, this cost has become so much more burdensome since *Norwood* that while that court thought that "it is not clear that the additional expenses of these" extra employees were sufficiently great to render the statutes unreasonable and arbitrary (13 F. Supp. 35), the burden is now demonstrably unreasonable. The present cost of compliance clearly demonstrates that these laws are no longer the "minimal burden" on interstate commerce that it was said in *Southern Pacific Co.* in 1945 that this Court had considered them in the earlier cases. It is submitted that the burden they now lay on interstate commerce, and on interstate commerce alone, is so much greater than that imposed by the statutes held invalid in *Southern Pacific Co.* in 1945 and in *Morgan v. Virginia* in 1946 that the Arkansas laws are clearly repugnant to the Commerce Clause under the rule of those decisions.

Moreover, the unreasonableness of the burden must be assessed in the light of the nature of the contribution which the employees in question make to safety of operations. Even a given cost which remains unchanged over a period of time may become unreasonable if the service which the cost provides becomes progressively more dispensable and increasingly unnecessary. The evidence clearly shows that because of technological and related developments the third brakeman and the third helper today make virtually no contribution to safety of operations. These developments have occurred since the time of the prior litigation. Consequently the burden of

maintaining such employees not only has increased but has involved employees whose services are more dispensable now than they have ever been. With respect to firemen, it is clear that the railroads during the prior litigation made no claim that firemen were unessential members of the engine crew. In view of the nature of steam operations, firemen in the 1920's did perform an essential service and one related to safety of operations. The development of the diesel locomotive and other related developments since that time have completely eliminated any constructive functions performed by firemen. Since firemen make no contribution to safety of operations at the present time, the entire cost of maintaining firemen as members of engine crews in road and yard service is an increase in the burden of complying with the Arkansas statutes which has accrued since the prior litigation.

The appellants assert that the carriers have failed to establish that any appreciable burden accrues from the Arkansas statutes (Brief, pp. 44-48). Appellants' discussion of this point is in the context of a quotation from *Missouri Pacific Railroad v. Norwood,* 283 U.S. 249, which held that the cost of complying with laws enacted to promote safety "is an element properly to be taken into account in determining whether such laws are arbitrary and repugnant to the due process clause of the Fourteenth Amendment" (p. 255). The reported decisions in the prior litigation show that the cost of compliance which the Court was discussing consisted of the wage costs attributable to the employees considered to be redundant to railroad operations (13 F.Supp. at p. 34). In the present case, the evidence in question shows comparable present wage costs for firemen and unnecessary brakemen and helpers. The witness who testified on behalf of the Brotherhoods on this point admitted that the exhibits and testimony introduced by the railroads correctly

showed the 1965 wage costs for firemen, third brakemen and the third helper on yard crews in Arkansas (A. 537-38). It is thus an admitted and firmly established fact that the redundant employees required by the Arkansas statutes impose a cost burden of $7,600,000.00 per year. Since this is the type of burden which the court considered to be relevant in the prior litigation, it is apparent that the appellees have fully documented their claims regarding the cost of complying with the Arkansas statutes.

Appellants insist, however, that this showing must be disregarded because of testimony by their statistical witness that if firemen and third brakemen were eliminated, other costs would arise which would in effect wipe out the savings in employment costs. It was this witness' view that accidents would increase, that operations would become inefficient, and that other chaotic and catastrophic developments would make railroad operations more costly than such operations are with these unnecessary crew members (A. 538-39).

Several factors must be taken into account in determining whether this opinion is entitled to any weight. It must be noted first that the background of the witness in question is primarily that of a statistician, that he has had no operating experience either as a railroad employee or a railroad official responsible for operations in freight and yard service (A. 560). There is absolutely nothing about this experience which, in any way, qualifies the witness to express a credible opinion on this subject. In contrast, the record shows in great detail that railroad operations with reduced crews (without a fireman and with two or fewer brakemen) have been and are being conducted safely and efficiently throughout the United States. This accumulated experience and the testimony regarding it completely destroy the speculations of the

Brotherhoods' witness as to what might ensue if Arkansas freight and yard crews are reduced to the crew size prevalent in other States.

Perhaps the most crucial evidence on this point is the evaluation of railroad operations without firemen that has been expressed by the Brotherhood of Locomotive Engineers. We cannot stress too strongly the fact that when freight and yard operations are conducted without firemen the responsible engine crew member involved in that operation is the engineer, who is represented on virtually all railroads in the United States by the Brotherhood of Locomotive Engineers. It would be difficult to conceive of anyone in a better position to evaluate the safety and efficiency of railroad operations without firemen than the remaining engine crew members. There is no need to speculate as to the views of the engineers and their representatives on this subject. In 1965 Mr. Heath, Grand Chief Engineer of the Brotherhood of Locomotive Engineers with an extensive background as a working engineer, advised the Senate Committee on Interstate Commerce that, in the absence of firemen, "engineers are now efficiently and safely moving their trains over the road" (A. 507). Mr. Heath emphasized in his letter to the Senate Committee that this conclusion was based on the experience of the individual engineers who "are still physically present on the railroads running trains" (A. 506). Mr. Heath further advised the Committee that "as to the results of our experience study, the engineers report that the award as applied has not adversely affected either the employees or railroad service in general" (A. 507).

A later evaluation of the same matter by the same organization appears in the Report of the National Joint Board created by Arbitration Board No. 282 (PX 79). After an extensive study of operations without firemen in freight and yard service, the officer of the Brotherhood of

Locomotive Engineers designated to sit as a member of the National Joint Board concluded that firemen make no contribution to safety of operations in freight and yard service. This conclusion is expressed both in the Brotherhood of Locomotive Engineers' concurrence in the main report and in a separate report submitted by its representative (PX 79, pp. 18-19, 124-126). It is thus firmly established on this record that the engineers who continue to operate trains on which firemen are no longer used have concluded, on the basis of their experience, that firemen are not necessary for safe and efficient operations in freight and yard service. As Mr. Heath expressed the matter, "In short engineers are now efficiently and safely moving their trains over the road" (A. 507). In view of the unequivocal position taken by the Brotherhood of Locomotive Engineers it almost defies belief that the Brotherhood's statistical witness would suggest the contrary view that is indicated by his testimony (A. 509). In any event, we respectfully suggest that a comparison of the backgrounds of the individuals involved and their opportunity to observe and participate in the operations with respect to which they testified clearly establish the view of the Brotherhood of Locomotive Engineers as the valid and credible one.

Appellants also assert that data appearing in an exhibit submitted by the Kansas City Southern in some way supports their position. This data relates only to the Kansas City Southern which operates a small percentage of the railroad mileage in Arkansas (PX 109, p. 27). The data has no relevance to the situation of the railroads operating over 95% of the Arkansas mileage. Moreover, the data does not support the claims which the appellants make. All that the data shows is that the relative costs of employing enginemen and trainmen on the Kansas City Southern in Arkansas and on the system as a whole did

not vary appreciably during the period 1962-1965. Appellants argue that the system costs show that Award No. 282, as applied in States other than Arkansas, did not result in a lessening of wage costs for the Kansas City Southern. The basic assumption is that there was some radical change in the number of brakemen on the Kansas City Southern in 1964 and 1965, and that wage costs accordingly should have declined for the system as a whole as contrasted with Arkansas. What appellants overlook, however, is that the number of brakemen used in freight service (the Kansas City Southern figures do not involve yard service since it does not maintain yards in Arkansas) did not decline significantly during the years covered by the data, 1964-1965, because of the protracted procedures needed to effect reductions in the size of train crews (A. 244). Accordingly, there is nothing at all unusual about the fact that employment costs for trainmen on the Kansas City Southern, limited to freight operations, did not show a substantial decline in 1964 and 1965.

Regarding enginemen employment costs, appellants again assume that the system data should have shown a decline because of the firemen separated from the service in 1964 and 1965. It must be emphasized first that no evidence is cited to show what the decline was in the use of firemen in through freight service (the only class of service operated by KCS in Arkansas) as distinguished from local freight and yard service. Moreover, the fact that firemen employment costs did not decline appreciably in 1964 and 1965 is probably attributable to the payments required by the Award of Arbitration Board 282 during the initial period of time covered by the award (PX 20). As the award shows, payments of various kinds were required as firemen were separated from the service and it is undoubtedly these payments, which would necessarily characterize only the initial year or two of experience under the award, that account for the level of firemen

employment costs on the Kansas City Southern in 1964 and 1965.[1] All that the data for the Kansas City Southern shows is that during the first year and one-half of the period during which Award No. 282 was operative, employment costs were not appreciably reduced on the Kansas City Southern because of the factors discussed above. This does not mean, however, that the wage payments shown by appellees' testimony and exhibits do not accrue to redundant employees, and that in the absence of the requirements of the Arkansas statutes these employees and the wage payments involved would be eliminated. We have not suggested that this elimination would occur overnight and it is the necessary gradualness of the process that is reflected in the data relating to the Kansas City Southern's employment costs in 1964 and 1965. Appellants simply have misinterpreted the data and have attempted to construct the most absurd and pretentious claims on the basis of this misinterpretation.

The lower court considered these same contentions and concluded as follows:

> "Compliance with the Arkansas statutes places upon the carriers substantial financial burdens and also burdens them otherwise. As to cost of compliance in money the carriers' evidence is to the effect that the cost now amounts to $7,600,000 per year and can be expected to go higher. That figure seems to represent the direct outlay of the carriers in com-

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[1] This is also indicated by data showing that wage payments to firemen in through freight service for the Kansas City Southern as a whole remained at comparable levels from 1962 to 1965 (Exhibit D to Plaintiffs' Exhibit 86). The figures are as follows:

1962	1963	1964	1965
$261,088	$265,085	$274,099	$239,000

Apparently the decline in wage costs started in the latter part of 1965 and is thus not covered to any significant degree by the data to which the appellants refer.

pensating the firemen, the extra brakemen, and the extra helper. That direct outlay is subject to offsetting costs that would be incurred if the two extra crewmen were eliminated; the carriers have not taken those offsetting costs into account in reaching their $7,600,000 figure, but it seems clear that after all reasonable offsets are taken into account, the net cost of compliance will remain very heavy."

The evidence fully supports these findings and completely refutes appellants' arguments to the contrary.

7. State Line Crew Adjustments.

In addition to these cost burdens, the statutes in question obstruct interstate commerce in other respects. Perhaps the best illustrations of the impairment of the free flow of interstate commerce resulting from these statutes are the absurd rituals they require near the Arkansas state line. Kansas City Southern trains operating between Pittsburg, Kansas and Watts, Oklahoma pass through portions of those states as well as Arkansas and Missouri on a 107 mile run. Only 28 miles of this run is in Arkansas, but the additional employees necessary to increase the crew to six ride the train between Watts and Noel, Missouri for a distance of 36 miles (PX 86, pp. 4-5).

Trains of the St. Louis-San Francisco Railway Company operating over the 174 mile run from Chaffee, Missouri to Memphis, Tennessee pick up, or drop off, an extra brakeman in Hayti, Missouri who rides for a distance of 93 miles between Hayti and Memphis solely to comply with the Arkansas law (PX 90, p. 11). Rock Island operates through freight trains from Memphis, Tennessee to Tucumcari, New Mexico, and a third brakeman is added for the segment between Memphis and Hartshorne, Oklahoma for the sole purpose of complying with the Arkansas statute (PX 25, p. 6). The heavy

volume of interstate through freight trains operated by Missouri Pacific and Cotton Belt between Dupo, Illinois and points in Texas, and between East St. Louis, Illinois to Corsicana, Texas, respectively, on which crew members are added or removed at or near the Arkansas border have already been discussed (Sec. I. B (3)). These are only a few illustrations of the bizarre ceremonies that are observed daily near every point where the tracks of the appellees cross the Arkansas boundary. It is the tribute exacted for the privilege of moving the nation's commerce through this state.

These strange practices, mandated by state statute and having no economic or logical justification, were described by Judge Rifkind, Chairman of the Presidential Railroad Commission in this language.[1]

> "In the train service, you find these extraordinary conditions. You find a train running along, and it is served by a conductor and two brakemen, which is in most cases the normal crew for trains. It comes to a State boundary and the train slows down, it doesn't quite stop, and another brakeman jumps aboard. He rides a short distance, maybe 20, 30, 40, 50 miles, until he comes to the other boundary of that State, at which point the train slows down and he gently drops to the side of the train. He hasn't done any work on that train. Why is he there? Because the legislation of that State requires an extra brakeman for every train that passes through that State. It doesn't contribute to a man's self-respect to be assigned to that kind of a job."

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[1] These observations were read to both the House and Senate committees considering legislation that became Public Law 88-108. Hearings before House Committee on Interstate and Foreign Commerce, p. 188. Hearings before Senate Committee on Commerce, p. 125.

Judge Rifkind's remarks preceded the Award of Board No. 282 permitting the removal of firemen. Thus the operation of the Arkansas laws produces a burden twice as heavy, and twice as indefensible, as the illustration he describes, because firemen as well as the "third brakeman" now participate in these state line rituals. For example, Missouri Pacific trains operating between Coffeeville, Kansas and Van Buren, Arkansas, are typically manned by a crew of four men between Coffeeville and Greenwood Junction, Oklahoma where *two* crew members are added for the balance of the journey which is *six miles* into Van Buren (PX 2; PX 6; PRX 13, pp. 9-11). This railroad must also pay the price of extra employees on the initial six miles on trains from Van Buren to Coffeeville for the privilege of getting the train out of Arkansas.

No doubt it was this sort of situation that Judge Bartels had in mind in *Halpern v. Pennsylvania R. R.*, 189 F.Supp. 494 (1960), a shareholders action brought to enjoin featherbedding, when he said:

> "* * * Moreover, the States of New York, Ohio and Indiana compel the Railroad to maintain minimum size crews on trains, including certain personnel who are unnecessary to the operation of the equipment. Plaintiff does not dispute this, but asserts that the Railroad has not shown whether it would be unable to 'be exempted from operating the "full crew" provisions outside of the mentioned States.' Changing the number of men in a crew at each crossing of a state boundary would not only be a difficult and inefficient operation but might in itself constitute waste and mismanagement on the part of the officers and directors. *It could hardly be denied that it would constitute an undue burden upon interstate commerce* * * *" (Emphasis added).

It must be remembered that the salary costs for the extra employees are not the only impositions of these laws

on interstate commerce. The railroad business is competitive within itself, and with other forms of transportation, and the delay to train movements incident to picking up and letting off these employees near the state lines is not the minimal burden that it might first appear. Mr. Sheppard testified that these delays were of real significance to the railroads in their efforts to maintain their schedules, and that such stops resulted in delays of a minimum of ten minutes (A. 128). Mr. Pelton, an experienced engineer testifying for intervenors, testified that stopping and starting a train of 100 cars would result in a loss of 15 minutes running time (A. 325). Thus a through freight train crossing Arkansas is delayed a minimum of 20 to 30 minutes by its stops at or near the border when it enters and when it leaves the state. This loss of running time, imposed as a penalty for moving an interstate train through Arkansas, may result in failure to arrive at interchange points in time to make expeditious and efficient use of a connecting carrier's schedules. A 20 minute delay to a train moving across Arkansas can result in hours of delay in the arrival of freight at its ultimate destination when it causes missed connections with other trains at points beyond Arkansas.

The absurdities resulting from the operation of the switch crew law are equally demonstrable. It not only requires that six men perform operations in Arkansas that are performed by three at places such as St. Louis and Kansas City (PX 31, p. 14), but also results in six man crews and four man crews doing the same work in the very same yards. This is the case in the Missouri Pacific yards at Texarkana which are bisected by the Arkansas-Texas state line. Some crews work only in the Texas sections of the yards and are manned by four men. Others work in the Arkansas as well as the Texas sections and have six men, and all do the same work (PX 31, pp. 10-1).

It is undeniable that these laws impose a substantial burden on interstate commerce. It is beyond dispute that the extent and scope of this burden is entirely out of proportion with that which existed when the earlier cases examining these laws were tried. The only rational conclusion to be drawn from the evidence is that the sole purpose and result of these statutes is to secure jobs, not safety. The Court is not required to be blind to history,[1] nor to that which is obvious in this litigation—that it is the make-work aspect of these laws that intervenors seek

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[1] See Lecht, **Experience Under Railway Legislation** (1955), pp. 93-94: "Trainmen and firemen assumed the lead in pushing fullcrew bills because unemployment was particularly severe among their members."

Slichter, **Union Policies and Industrial Management** (1941), p. 187:

> "One of the most ambitious efforts to make work by requiring excessive crews, or the employment of unnecessary men, is being made (with great success) by the train service unions on the railroads. These unions have been spurred to require the employment of unneeded men by the great drop in the employment of train service employees. The train service unions have used three principal methods to make work: (1) support of legislation, either requiring full crews or limiting the length of trains; (2) retaining obsolete rules which make work; and (3) enforcing the interpretations of rules so as to make work and to penalize the roads for using economical methods of operation."

Twenty years later, at about the time the national manning-level crisis began, the same author considered the situation unchanged:

> "Although there are an almost indefinite number of make-work methods, the following eleven varieties include most of the make-work practices: . . .
>
> "**Requirements of Excessive Crews.** The railroad crafts have made a few attempts to negotiate excessive crew requirements, but they have relied chiefly on legislation. They have sought two types of laws—full-crew laws and train limit laws."

(The authors proceed to explain that the latter laws have been declared unconstitutional, but that the manning-level legislation then remained in effect.) Slichter, Healty and Livernash, **The Impact of Collective Bargaining on Management** (1960), pp. 318, 322-23.

to preserve. This is revealed in the pleadings,[1] and acknowledged by appellants in this Court by their assertion that while these statutes were originally enacted for "safety" they should now be retained "to affect the quality and quantity of railroad employment" (Brief, p. 59).

By the name they give him, even the operating employees recognize that the extra man's presence is related to statutory mandate rather than a need for his services in train operations. He is not called a "brakeman", or "switchman" or "flagman", as crew members are usually denominated in the railroad industry by the services they perform. He is called the "lawman", as acknowledged by intervenor's witnesses (PRX 11, p. 14; PRX 12, 14, 24-5; PRX 13, 9-11).

II. THE DISTRICT COURT'S FINDINGS AND CONCLUSIONS ARE CONSISTENT WITH THE WELL CONSIDERED DECISIONS OF OTHER COURTS DEALING WITH CREW CONSIST LAWS.

Crew consist legislation has been examined by courts of other jurisdictions. The decisions in these cases reveal a general acceptance of the constitutional standards which the District Court applied.

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[1] Indeed, the motion to intervene makes it perfectly plain that the primary interests of the brotherhoods in this legislation lies in the economic benefits received by the brotherhoods and their membership from the existence of these laws. The first two recitals of the brotherhoods' interest in the lawsuit are:

> "The relief sought by the complaint would have a substantial and permanent damaging effect on the Unions in their capacity as agents and spokesmen for their members in that it would result in the loss of employment of large numbers of such members whose jobs are protected by the statutes being challenged.
>
> "The relief sought by the complaint would have a substantial and permanent damaging effect on the Unions in that it would result in a large loss of organizational membership and income because of the loss of employment of large numbers of their members whose jobs are protected by the statutes being challenged."

In *Sullivan v. Shreveport*, 251 U.S. 169, 40 S. Ct. 102, 64 L. Ed. 205 (1919), the validity of a city ordinance requiring both a conductor and a motorman on each street car operated within the city was upheld against attack on the 14th Amendment grounds that it was unreasonable, arbitrary and a deprivation of property without due process of law and without compensation. The Court weighed the testimony bearing on whether one man could operate a new type car as safely as two could operate the cars in use when the ordinance was adopted in 1907, and concluded that since the record "fails to show a clear case of arbitrary conduct on the part of the local authorities" the ordinance would be held valid.

The ordinance was again attacked on the same grounds in *Shreveport Rys. Co. v. City of Shreveport*, 37 F. 2d 910 (1930). The District Court referred the case to a Master who heard testimony for several weeks, and his report to the effect that conditions affecting the safety of operation of "one-man street cars" were substantially changed since the prior case, encompassing a period of 12 years, was accepted by the court. The court held that the ordinance requiring two men on street cars "in light of the proven experience of other cities, is arbitrary, and amounts to taking of plaintiff's property without due process of law, results in confiscation * * *" and enjoined the enforcement of the ordinances.

The case was affirmed in *City of Shreveport v. Shreveport Ry. Co.*, 38 F. 2d 945 (5 Cir., 1930), and the Court of Appeals pointed out that the prior decision of the Supreme Court "did not go further than to hold that the ordinance was valid as applied to conditions existing at the time the suit was filed in 1917". In language equally applicable to the Arkansas laws, the Court says:

> "There is no doubt that an ordinance, reasonable as applied to conditions existing at the time of its

adoption, may become unreasonable by a change in conditions, and a city may not impose unnecessary restrictions upon lawful occupations under the guise of protecting the public interest."

Certiorari was denied (281 U. S. 763 (1930)).

A city ordinance of Atlanta requiring two men on street cars operating within the fire limits of the city was challenged in *Georgia Power Co. v. Borough of Atlanta*, 52 F. 2d 303 (1931). The court found that the practical effect of the ordinance would be to require two men on all of the company's street cars since all of its routes passed through the fire limits and it would be impractical to put on and take off men at the boundaries of the fire limits. Relying on the *Shreveport* case, the court issued a preliminary injunction against the enforcement on its finding of substantial unrecoverable expense to the company in complying with the ordinance and that "the reasonableness and validity of the ordinance are at least very doubtful * * *." No further published decision appears in this case. Apparently the city abandoned efforts to enforce the ordinance.

A two-man street car ordinance of San Francisco, originally adopted in 1908 and amended in 1918 and 1935, was attacked as in violation of the 14th Amendment in *San Francisco v. Market St. Ry. Co.*, 98 F. 2d 628 (9 Cir., 1938). The company's contention that because of changed conditions since the 1918 amendment the ordinance had "become arbitrary, unreasonable and unnecessary for the safety and convenience of the public" was sustained by the District Court. In reversing, the Court of Appeals found that there was only negligible difference between the safety devices shown in the record and those described in *Sullivan v. Shreveport, supra*, decided by this Court in 1919. The subsequent Shreveport decision by the Fifth Circuit Court of Appeals holding the ordinance unconsti-

tutional on the basis of changed conditions is distinguished on the facts with particular emphasis being placed on San Francisco's having the steepest grades in the United States in its streets, heavy fogs during both summer and winter, unusual angles of intersection of the streets, and unusual concentration of pedestrian and vehicular traffic due to geographical features. On these considerations the Court found that, with reference to San Francisco, "the two-man requirement affirmatively appears to be reasonable."

The crew consist law of Pennsylvania was challenged as violating both federal and state constitutional due process provisions because they were unreasonable, arbitrary and not in furtherance of their stated purpose of safety, and also on the ground of imposition of an undue burden on interstate commerce in *Pennsylvania R. Co. v. Driscoll,* 198 A. 130 (Pa., 1938). The Supreme Court of Pennsylvania sustained the trial court's action of continuing a preliminary injunction against enforcement of the Act, and remanded the case.

On remand, the case was fully developed before the Chancellor during the course of four months required for the taking of testimony alone. The opinion of the Chancellor holding the disputed sections of the Act to be unconstitutional was adopted by the Supreme Court of Pennsylvania on review and is reported along with that Court's own opinion in *Pennsylvania R. Co. v. Driscoll,* 9 A. 2d 621 (Pa. 1939). The Chancellor held the minimum crew requirements to be invalid as in contravention of the due process clauses of both the state and federal constitutions and of the commerce clause of the federal constitution. The Supreme Court rested its decision upon violation of the state constitution's due process requirements, feeling that because of the result it was unnecessary to reach the federal constitutional questions.

The *Driscoll* court makes the most articulate distinction to appear in the published decisions between safety as an absolute concept of avoiding any conceivable mishap, and safety as a relative term applicable to ordinary human activities. In defining the term "safety" as it was relevant to its inquiry into the validity of the Pennsylvania crew consist laws, the court said (198 Atl. 134-5):

> "'* * * Whether the measure promotes safety, or has a tendency to do so, must indubitably turn on facts and circumstances regarding that subject, and the relation which the provisions of the Act bear to safety. An analysis of the statute and the statute's requirements is necessary; we must compare these with the incidents of transportation, including the causes which create the need for safe-guards, and the methods now employed to obtain the safety of the public and employees. When the result is reached, *if it is found the statutory protection is of such slight consequence, or is so incidental as to cause the provisions of the Act to be wholly impractical, and not in promotion of the safety it seems to strive for, then its operation would be unreasonable and arbitrary.*
>
> "'* * * *Safety is a relative term. Absolute safety can never be insured,* and comparative safety is attended by certain necessary elements of disadvantage which must enter the comparison. One of these elements is cost, and it must be considered.
>
> "'Cost reflects not only the expense of compliance in dollars and cents to the railroad but more important, bears on the ultimate expense to the public at large which uses its facilities. The cost of complying with state laws enacted to promote safety is an important element in determining whether the law is arbitrary and unreasonable. * * * Appellee's evidence shows that it will cost the railroad about $4,500,000 annually to carry out the provisions of this Act in the

State. *It is urged, not without merit, that the speculative advantage to safety through the introduction of additional human agencies is so highly problematical and uncertain,* that the expenditure of this sum each year for that purpose out of the net annual income for the Pennsylvania region is unreasonable and arbitrary.' " (Emphasis supplied.)

The views of the *Driscoll* court that slight and problematical contributions to safety were insufficient to save a statute imposing a substantial regulatory burden on private interests were fully vindicated seven years later in *Southern Pacific Company v. Arizona, supra,* where this Court said that the "decisive question" in measuring the validity of a purported safety statute was whether its effect as a safety measure "is so slight and problematical as not to outweigh" the constitutional rights upon which its burden falls.

Weinberg et al. v. Northern Pac. Ry. Co. (8 Cir., 1945), 150 F. 2d 645, was a suit for injunction against city officials to restrain enforcement of an ordinance of Duluth, Minn. requiring two men in a locomotive operated in the City. The attack was limited to application of the ordinance to a particular 44-ton Diesel electric engine used as a yard engine by plaintiff, and the permanent injunction entered by trial court was sustained on appeal. The ordinance recited its purpose in this familiar language: "That to promote the safety and welfare of employees operating locomotives * * * and to protect and promote public safety * * *". The trial court reviewed extensively the operating practices with regard to this particular locomotive and concluded that "the employment of a fireman or helper thereon would be mere surplusage, and the contribution to the safety of operation by his addition would be neglibigle." The Court of Appeals, after reviewing the record, added:

> "In view of all these facts the question of any safety arising by the presence of an additional man in the engine is purely imaginary and speculative."

The Court recognized that if the ordinance can be justified it, like the Arkansas Acts, must be on the theory that it is a reasonable exercise of the police power. However, it pointed out the traditional limitation on the police power as follows:

> "The City Council, however, may not under the guise of protecting the public interest, arbitrarily interfere with the operation of the common carrier or impose unreasonable restrictions upon its lawful calling. To justify the legislation it must appear that the interests of the public, generally, as distinguished from those of a particular class, require such interference, and even when this condition may be said to exist, the means to accomplish the purpose must be reasonably necessary and not oppressive, not arbitrary." (Citing cases.)

The decision in *City of Shreveport v. Shreveport Ry. Co., supra,* is cited with approval, and the distinction is pointed out that in *Weinberg,* unlike the Shreveport case, no passenger traffic is involved. This is also true of the case at bar.

The Court of Appeals pointed out that both it and the district court were mindful that if the reasonableness of a statute is "fairly debatable", then the courts would not interfere with the legislative determination (p. 648). It then held, in language of particular significance here, that conflicting opinions of the witnesses concerning safety of railroad operations did not make the issue "debatable" in this context, stating:

> "It is said there was some conflict in the evidence and hence the question presented to the trial court

was a debatable one, and the court should have denied relief. Certain witnesses testified, giving their opinions as to the danger of operating the one-man Diesel without a second man at all times in the engine. But opinions not supported by facts, and which are contrary to the physical facts and do violence to scientific principle or reason, are robbed of all probative value. It may well be doubted whether this question was one subject to expert testimony. *Spokane & I. E. R. Co. v. United States,* 241 U.S. 344, 36 S. Ct. 668, 60 L. Ed. 1037; *Missouri, K. & T. Ry. Co. v. Grimes,* Tex. Civ. App., 196 S. W. 691; *Cleveland, C., C. & St. L. Ry. Co. v. De Bolt,* 10 Ind. App. 174, 37 N. E. 737" (p. 651).

In language squarely applicable to the testimony of several of intervenors' witnesses in the case at bar that it was their opinion that it was unsafe to operate trains in Arkansas with crews of less than six men, the court continued:

"It is not enough to sustain this ordinance that some witness may have given it as his opinion that it was unsafe to operate this engine without it being manned with two men in the cab. If that were sufficient, no question could be imagined that could not be made debatable. But the test is that it must be fairly debatable; in other words, it must be reasonably debatable or justly debatable. Certainly these opinions must bear the test as to whether facts in the record rationally sustain them, and we think the facts do not sustain them. Without this opinion evidence there is not a scintilla of evidence in the record to sustain the legislation" (p. 652).

The district court had concluded that the contribution of an extra crew member to safety would be "negligible", and the court of appeals found that such contribution would be "purely imaginary and speculative." Thus the

absence of a genuine and significant relationship between the purpose of the regulation and what it produced in its practical operation required holding it invalid under the Due Process Clause, just as the *Driscoll* court had done when it found a crew consist law's contributions to safety to be of "slight consequence" and "highly problematical and uncertain", and as this court had done in *Southern Pacific* under the Commerce Clause upon finding the statutory effect as a safety measure to be "slight and problematical."

Considerable litigation has dealt with whether crew consist laws apply to operations conducted with new types of railroad equipment, developed after the adoption of the regulation, where the benefit to be derived by using the number of men prescribed by the law is dubious. These laws were held inapplicable to gasoline and electrically driven passenger cars in *Texas v. Texas & N. O. R. Co.* (Tex. Civ. App., 1931), 42 S. W. 2d 1091, and *Moredick v. Chicago & N. W. R. Co.*, 125 Neb. 864, 252 N. W. 459 (1934), the Nebraska court observing that no useful purpose would be served in requiring both a fireman and an engineer on such a vehicle. In *Western Pac. R. R. Co. v. State,* 69 Nev. 66, 241 P. 2d 846 (1952), it was held that the Nevada law did not apply to such a motor car, the court saying:

> "The company contends that in the operation of the Budd car no duties remain to be performed by a fireman. This, we feel, is the sole issue to be determined. To impute to the legislature an intent to require employment of a fireman in the absence of such duties would in effect be to impute an intent that these duties continue to be performed notwithstanding conditions rendering them wholly unnecessary. In the light of the language used and since the express purpose of the act is public safety, this would indeed be

an absurd result. In addition, such construction would appear to be so clearly unreasonable as to render the act invalid in exceeding the police power of the state."

In response to the claim, made there as it is here, that the fireman's duties had simply diminished but that he was still needed to perform such tasks as insuring that the engineer obeyed rules and orders and watch for signals and call them to the engineer's attention, the court said that these were essentially duties of the engineer and that "the employment of a fireman can only be justified on the assumption that the engineer will not properly perform the duties assigned to him." The Court continued:

> "*Further, such sharing of responsibility would appear as a safety measure to partake of a somewhat dubious quality.* As a matter of common knowledge we know that operators of high speed, interurban electric trains not only operate upon their own sole responsibility (under more hazardous traffic conditions than this railroad through the state is required to meet) but are firmly and positively isolated against the distractions created by the presence of others.
>
> Furthermore, even assuming such duties to be desirable in the interest of public safety, it does not appear from the record that a separate crew member is at all necessary to their performance. From undisputed testimony frequently reiterated throughout the record it would appear clear that all such duties could on the Budd car be assumed by the conductor or brakeman or shared between them." (Emphasis supplied.)

In 1964 the Nevada Supreme Court expressly adhered to its 1952 decision and held the crew consist laws of that state inapplicable to trains powered by diesel locomotives. The court rejected the argument that the 1952 decision was distinguishable because it applied to a Budd car (a single,

self-propelled passenger car), saying that the opinion in that case "applies particularly to diesel locomotives such as are employed on the trains that are dealt with here." The Court reviewed the factors that demonstrated that a fireman was not required for the safe operation of a Budd car, and said:

> "These conditions apply equally with reference to diesel engine drawn freight trains."

The opinion strongly suggests the court's view that if the statute were construed to require a fireman on a diesel locomotive it would be an unreasonable exercise of the police power and in violation of due process. *Southern Pac. Co. v. Dickerson* (Nev. 1964), 397 P. 2d 187.

The Texas crew consist laws received a like construction in *Texas v. Southern Pac. Co.*, 392 S. W. 2d 497 (Tex. Civ. App., 1965), *writ of error refused, no reversible error.* The court held that its earlier decisions that these laws did not apply to self-propelled cars effectively disposed of any claim that they applied to trains powered by diesel locomotives.

Since *Driscoll* in 1939 and *Weinberg* in 1945 held that railroad crew consist laws requiring excessive crews could not pass muster when tested in terms of due process, and *Southern Pac. Co.* and *Morgan* strongly suggested in 1945 and 1946 the same result if validity was measured against the limitations of the Commerce Clause, there only has been one final court decision dealing with such laws that is out of step with the teachings of those decisions. In sustaining the Indiana crew consist laws in a summary proceeding, *without a trial on the merits,* the Indiana court simply ignored those decisions. *Public Service Commission of Indiana et al. v. The New York Central Railroad Co. et al.* (Ind., 1966), 216 N. E. 2d 716.

In Indiana the plaintiff railroads brought action to enjoin enforcement of these laws, and filed affidavits and

exhibits in support of their motion for a temporary injunction. Counter affidavits were filed, and after a one-day hearing the trial judge granted the temporary injunction. The Supreme Court of Indiana reversed, concluding that the statutes were constitutional, *and directed that final judgment be entered against plaintiffs* by the trial court. One Justice, concurring, expressed the view that plaintiffs were entitled to have a trial of their case on the merits.

To support its conclusion that the laws were constitutional, the Indiana court relied on three considerations: (1) That a similar statute passed in 1907 had been sustained by it in 1909 and by the United States Supreme Court in 1911. (The action of this Court is reflected by a *per curiam* order of affirmance citing its first decision dealing with the 1907 Arkansas statute. *Pittsburgh, Cincinnati, Chicago, & St. L. Ry. Co. v. State,* 223 U.S. 713 (1911); (2) That in 1963 an Indiana circuit judge had sustained a demurrer in another action questioning the validity of these laws; and (3) That a presumption of constitutionality supports legislation until it is declared invalid by the courts. The court considered the technological advances made by the railroads to be irrelevant to its determination, observing that such advances were made for the purpose of meeting competition and:

> "In any event the alleged improvements in technology and operating changes cannot be used to justify a reduction in appellees work force. Such relief, if justified, is properly found in the legislature and not the courts."

It is respectfully suggested that the Indiana court could not have read *Norwood, Driscoll, Weinberg,* or Justice Black's decision in the earlier appeal of the case at bar, and rationally reached such a conclusion.

The Indiana railroads petitioned for certiorari. Because the limited record consisting of affidavits and exhibits pre-

sented in connection with the motion for a temporary injunction did not afford an adequate body of proof to permit a court to pass on the factual issues in the case (there having been no trial, no testimony and no opportunity for cross-examination), the narrow question presented to this Court was:

> "Whether a state appellate court can, consistent with the due process requirements of the Fourteenth Amendment, deny a trial of federal constitutional issues turning on factual presentations by directing the entry of final judgment in the course of an inter-

On the narrow question so presented, certiorari was denied. *The New York Central R. Co. v. Public Service Commission of Indiana,* 17 L. Ed. 2d 76 (1966). The Indiana decision is demonstrably wrong and doesn't even reach the basic issues that this Court in the case at bar remanded to the district court for resolution, i. e., whether changed circumstances have made crew consist laws unconstitutional in their present application.

In *Chicago & North Western R. Co. v. LaFollette,* 135 N. W. 2d 269 (Wisc. 1965), the railroads of Wisconsin challenged its statutes requiring only five men in freight and yard service crews on grounds essentially the same as those presented in the case at bar, but with the emphasis on the requirement of a fireman in these crews. The circuit court overruled demurrers filed by defendants, and on appeal the Supreme Court agreed that the facts alleged entitled the railroads to a trial on the question of the validity of the statutes as applied to modern railroad operations, saying:

> "We conclude that the complaint does state sufficient facts to entitle the respondents to a trial as to the constitutionality of the challenged portions of the 'full crew' statutes" (p. 283).

and

> "The challenge raised by the respondents is of sufficient magnitude to warrant a judicial inquiry. Certainly, the studies made by the boards on the railroad issues, raise sufficient doubt about the entire subject of full crew legislation" (p. 280).

The court considered *Norwood* as offering no obstacle to its examination into the validity of the statutes, observing that *Norwood* antedates the "age of dieselization" of which it took judicial notice (p. 282). Neither did it regard *The New York Cent. R. Co. v. Lefkowitz,* decided only a short time earlier, to be entitled to such weight as to preclude "our own independent evaluation of conditions as they exist today in Wisconsin" (p. 282). To the contrary the Wisconsin court found *Driscoll* to be the most impressive precedent in this field, stating:

> "We think the reasoning in Pennsylvania Railroad Co. v. Driscoll (1938), 330 Pa. 97, 198 A. 130, is most appropriate to this case" (p. 282).

On remand, after a forty-two day trial, the circuit judge held the statutory requirement of a fireman on light engines (those without cars) and in switching operations unconstitutional, but sustained the requirement of a fireman on way and through freight operations. The basis for the holding of invalidity was the court's finding that those statutory requirements bear no reasonable relationship to the safety of railroad operations. The basis for sustaining certain of the requirements was its finding that in those particular operations the fireman performed functions that could be characterized as "useful and necessary" to safety. Regarding these latter sections, the court observed:

> "The present laws are too sweeping and rigidly inflexible. They are essentially job statutes rather than safety measures as was originally intended."

Of course, the Wisconsin court was passing on the validity of a five-man crew requirement, and the holding was that it was valid in some operations and required an unconstitutionally excessive number of employees in others. The Arkansas statutes involved here require crews of six men in all operations they regulate. The unreported opinion of the Circuit Court of Dane County, Wisconsin was published on September 7, 1967.[1]

At the trial court level, there have been three other relatively recent decisions in state courts in this area. Two of these trial judges sustained the crew consist laws of their respective states. *New York Central R. Co. v. Lefkowitz,* 46 Misc. 2d 68, 259 N. Y. S. 2d 76 (1965), and *Akron, Canton & Youngstown R. Co. v. Public U. Comm.,* 9 Ohio Misc. 183, 224 N. E. 2d 169 (1967). The third judge held that the legislature could not have intended that the Nebraska crew consist law apply to trains powered by diesel locomotives because the proof showed that there were no essential duties for him to perform that could not be discharged by other members of the crew. *State of Nebraska v. Thurston,* District Court of Jefferson County, Nebraska, unreported Memorandum published January 19, 1965.[1]

The New York trial judge filed an extensive opinion. He recognized the relevance of the technological advances in the railroad industry, saying:

> "It (the record) does show, however, an impressive record of improvement in technology, which has tended to decrease substantially the hazards of rail-

[1] Referring to these opinions appellants state that "apparently they are unavailable for analysis" (Brief, p. 24). Since the Brotherhood of Locomotive Firemen and Enginemen and the Brotherhood of Railroad Trainmen, appellants here, were parties to the proceedings in Wisconsin and Nebraska, it is difficult to understand the purpose or significance of the quoted comment.

road operation, to railroad employees and the public, and lends considerable force to plaintiffs' argument that in light of present conditions the full crew laws are obsolete and have no reasonable relation to the safety of railroad operations."

He acknowledged that the inflexibility of these laws was unjustified:

"It must be conceded that the criticism leveled against the full crew laws is not without merit. They are mandatory and inflexible and make no distinction between differences which exist in the operation of different railroads, or in different types of operation on the same railroads. They may, as plaintiffs contend, exact needless and wasteful requirements in some cases, and it may be that some assignments may be as safely and efficiently handled with fewer employees than the laws require."

However, he concluded that the proof did not show the requirements of the extra employees to be so unreasonable as to warrant him in holding them to be in violation of due process. Judge Nolan stated that he considered the findings, including factual conclusions, reached by the Presidential Railroad Commission, the New York Public Service Commission, and the Canadian Royal Commission (PX 19, PX 112 and PX 113 in case at bar) but concluded that these Commissions did not "determine the precise question before the court in this action." This reveals the basic flaw in his reasoning that permeates the entire decision. Those Commissions found the extra employees unnecessary to the safe conduct of railroad operations, and that any duties they performed that were essential to safety could be performed adequately by other crew members. Judge Nolan seems to agree as evidenced by his unwillingness to hold the statute unconstitutional with respect to its requirement for a fireman even if it is as-

sumed that "the head brakeman is in all respects as competent as the fireman to perform and does adequately perform the duties assigned to both which are necessary in the interest of safety."

His reasoning is that although it is true that the statutes require more employees than are necessary to perform the work safely, since the extra employees do perform some work or service the statutes are not so unreasonable in their operation as to warrant his declaring them to violate due process. This simply accords to this legislation a greater degree of tolerance to unreasonableness than the authoritative decisions warrant. It is clear that even the *Norwood* court would have invalidated the statutes if it had found that less men could have performed the work as safely as the six man crew. In order to sustain the laws that court deemed it necessary to find, and did find, that the extra man they required "* * * still adds a material element of safety to employees and the public." Of course, Judge Nolan's conclusion is in square conflict with the reasoning of *Driscoll* and *Weinberg*, and he makes no effort to distinguish those decisions.[1]

The two other trial court decisions warrant only brief comment. In *Akron, Canton & Youngstown R. Co. v. Public U. Comm.*, 9 Ohio Misc. 183, 224 N. E. 2d 169 (1967), the judge of the Court of Common Pleas of Franklin County, Ohio sustained crew consist statutes of that state requiring five men on some train operations and four on others. The decision is pending on appeal and is of little value in measuring the constitutional validity of the Arkansas laws requiring six-man crews.

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[1] Judge Nolan's decision was affirmed by the Appellate Division without opinion (282 N. Y. S. 2d 68). On appeal to the Court of Appeals, the Court was evenly divided after hearing argument and re-argument has been set for the week of October 7, 1968, by order entered on July 2, 1968.

In *State of Nebraska v. Thurston,* District Court of Jefferson County, unreported memorandum published January 19, 1965, the state trial court judge was also dealing with a statutory requirement of only a five-man crew, and the controversy was in terms of whether the statute required a fireman on a diesel locomotive. The court found that a fireman was not necessary to the safe operation of a diesel locomotive, and concluded that the Legislature could not have intended to apply the statute to trains powered by such locomotives.

The foregoing are all of the decisions dealing with crew consist laws that would appear to have any relevance to the issues in the case at bar. Appellees submit that the articulate reasoning in *Driscoll, Weinberg,* and the District Court in the case at bar, clearly establish these decisions as the leading ones in this area subsequent to, and consistent with, *Norwood.* They are also entirely in accord with the controlling precedents of this Court.

III. THE ARKANSAS STATUTES ALSO CONSTITUTE AN IMPERMISSIBLE DISCRIMINATION AGAINST INTERSTATE COMMERCE AND VIOLATE THE EQUAL PROTECTION CLAUSE OF THE FOURTEENTH AMENDMENT.

In the District Court appellees also urged that these statutes discriminated against interstate commerce and violated the Equal Protection Clause. The court below found it unnecessary to pass on these claims because of its holding that the statutes were clearly unconstitutional on other grounds. 274 F.Supp. 300. Appellees assign invalidity of the statutes on these grounds as an additional or alternative basis for affirmance of the Judgment of the District Court.

A. Discrimination Against Interstate Commerce.

Quite apart from restrictions on state action which unduly burdens interstate commerce, the Commerce Clause

absolutely prohibits state action which discriminates against interstate commerce. The first decision of this Court to review one of these Arkansas laws contained the caveat that a state's freedom to burden interstate commerce extended only to indirect and remote burdens and not to legislation "directed against commerce." *Chicago, R. I. & P. Ry. v. Arkansas, supra.*

As early as 1879, this Court said:

> "(I)t must be regarded as settled that no State can, consistently with the Federal Constitution, impose on the products of other States brought therein for sale or use, . . . or the transportation thereto of the products of other States, more onerous public burdens or taxes than it imposes upon the like products of its own territory."

Guy v. Baltimore, 100 U.S. 434, 439 (1879). The principle consistently has been followed, and is applicable although the state statute was purportedly adopted to promote public safety. *Dean Milk Co. v. City of Madison,* 340 U.S. 375 (1951); *Hale v. Bimco Trading, Inc.,* 306 U.S. 375 (1939); *Brimmer v. Rebman,* 138 U.S. 78 (1891).

In sustaining the power of a state to limit width and weight of motor traffic on its highways in *South Carolina State Highway Dept. v. Barnwell Brothers,* 303 U.S. 177 (1938), this Court reasoned:

> "The present regulations, or any others of like purpose, if they are to accomplish their end, must be applied alike to interstate and intrastate traffic both moving in large volume over the highways. The fact that they affect alike shippers in interstate and intrastate commerce in large numbers within as well as without the state is a safeguard against their abuse."

The necessity of constitutional protection of interstate commerce from discriminatory state legislation is de-

scribed by Chief Justice Stone in a footnote to the *Southern P. Co. v. Arizona* decision in this language:

> "In applying this rule the Court has often recognized that to the extent that the burden of state regulation falls on interests outside the state, it is unlikely to be alleviated by the operation of those political restraints normally exerted when interests within the state are affected."

As recent a decision as *Huron Portland Cement Co.*, 362 U.S. 440 (1960), defined the permissible limits within which a state may affect interstate commerce as follows:

> "State regulation, based on the police power, *which does not discriminate against interstate commerce* or operate to disrupt its required uniformity, may constitutionally stand" (Emphasis supplied).

In *Best & Co. v. Maxwell*, 311 U.S. 454, 85 L.Ed. 275, 61 S.Ct. 334 (1940), this Court unanimously held unconstitutional a North Carolina statute requiring payment of a tax for the privilege of displaying samples in a rented hotel room occupied temporarily for the purpose of securing retail orders. The tax was imposed only on those "not being a regular retail merchant in the State of North Carolina," and was held to contravene the Commerce Clause, the Court saying:

> "The Commerce Clause forbids discrimination, whether forthright or ingenious. In each case it is our duty to determine whether the statute under attack, whatever its name may be, will in its practical operation work discrimination against interstate commerce."

Apparently in none of the earlier cases involving these laws has the contention been urged that they discriminated against interstate commerce. The operations of all seventeen intrastate railroads in Arkansas are exempt

from the operations of these laws because each has less than 50 miles of track.[1] On the other hand, the freight crew law applies to 10 of the 11 interstate railroads operating in the state, and the switch crew law applies to 8 of the 11.[2]

The extent to which the impact of these laws falls on interstate commerce, while wholly exempting the local interests, is put in better perspective by examining their coverage in terms of railroad trackage. The switch crew law applies to 98.7% of the interstate railroad trackage in Arkansas, and the freight crew law applies to 99.5% of such trackage.[3] By their exemptions these laws achieve perfection in relieving the local railroads from their burdens, and fall only slightly short of perfection in extending their discriminatory requirements to all interstate railroad operations in the state.

The classification by which the discrimination is effected can hardly be regarded as ingenious. As recently as *Norfolk and Western R. Co. v. Missouri State Tax*

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[1] Statistical data pertaining to these railroads is contained in PX 67, Ex. B, and it would appear to indicate that two of them have in excess of 50 miles of line. However, operating officials of these two roads explain this apparent discrepancy in PX 47 and PX 48 and make it clear that they, along with all of the other intrastate railroads, operate pursuant to the 50 mile exemption.

[2] The switch crew law, in fact, also regulates the operations in Arkansas of 10 of the 11 interstate railroads. While the Louisiana and North West Railroad Company and the Arkansas & Louisiana Missouri Railroad Company each have less than 100 miles of line and are therefore exempt from this statute, each is subject to the freight crew law, all switching operations in Arkansas by these railroads is done by the freight crews that bring the trains into the State, and thus the six man crew required by the freight crew law results in mandatory compliance with the switch crew law. See PX 65 and PX 66.

[3] PX 67, Ex. A reflects interstate trackage in Arkansas to total 5,204 miles. The freight crew law applies to railroads operating 5,179 of those miles and the switch crew law applies to railroads operating 5,135 of that total.

Comm., ... U.S. ..., 19 L. Ed. 2d 1201 (1968), this Court made it clear that the Due Process and Commerce Clauses prohibit an unconstitutional **result** even if it is produced by a normally permissible legislative or regulatory scheme, stating:

> "The facts of life do not neatly lend themselves to the niceties of constitutionalism; but neither does the Constitution tolerate any result, however distorted, just because it is the product of a convenient mathematical formula which in most situations, may produce a tolerable product" (p. 1208).

The *result* of these statutes is that only interstate commerce is burdened by them, and this discrimination brings them clearly within the prohibition of the Commerce Clause.

There is nothing in the proof to furnish any rational basis for these exemptions based upon the number of miles of track operated by a railroad except the impermissible purpose to exempt the local interests. The switch crew law exempts carriers with less than one hundred miles of track. However, switching operations are by their very nature local; the same sorts of hazards inhere in them without regard to how many miles of main line track the carrier has. The hazards of a switching operation in Arkansas are the same whether conducted by one of the plaintiffs or by one of the seventeen intrastate railroads. Judge Nolan so found: "(I)t would seem that the dangers inherent in switching operations are equally great on short line roads as on roads of greater length." *New York Central R. Co. v. Lefkowitz,* 46 Misc. 2d 68, 95, 259 N. Y. S. 2d 76, 105 (1965).

The operations of the exempted railroads are described in PX 47 through PX 63. All are common carriers by rail, all interchange traffic with one or more of the appellee railroads and thus handle the same type of cars as do the appellees, and all operate over public grade cross-

ings. The climatic and weather conditions and geographic characteristics affecting these railroads are, of course, identical to those encountered by appellees in their Arkansas operations, and motive power is essentially similar to the diesel locomotives used by appellees.

However, perhaps the most vivid proof that the number of crew members necessary to perform switching operations safely is wholly unrelated to whether the railroad operates more or less than 100 miles of track is contained in the moving pictures introduced by appellees (PX 105) depicted a six man Missouri Pacific crew switching at Kensett, Arkansas with two or three crew members idle the bulk of the time. The film then shows a three man D. K. & S. crew switching *over the same tracks, and with the same type of equipment,* and experiencing no difficulty getting the job done. The only observable difference in the two operations with reference to safety is that the D. K. & S. operation exposes three less individuals to the hazards of the employment. It is interesting to note in this connection that operations on the D. K. & S. with a three man crew are, in fact, safe. During 1965 while operating 11,686 locomotive miles and 22,264 freight car miles (PX 67, Ex. B), there were no personal injuries whatever arising out of the operations of this railroad (PX 56) and this record was given special recognition by the National Safety Council (PX 56, Ex. A).

Quite obviously, there is nothing about the fact that Missouri Pacific operates more than 100 miles of line that makes it necessary, or desirable or even rational that it employ six men to safely conduct operations that the D. K. & S. does with three and that most Arkansas intrastate railroads do with four or less (See summary of PX 47 through PX 74, p. 2).

The 50 mile exemption in the freight crew statute is equally irrational. What rational relationship is there be-

tween the number of miles of track operated by a railroad and the number of crew members required to operate a freight train safely on that railroad? If the legislature had been seeking to create an exemption rationally related to safety of operations (instead of one rationally related to the political expediency of exempting local interests), then many were available. Perhaps the best listing of considerations that are rationally related to fixing safe crew sizes is that contained in the Award of Arbitration Board No. 282 in its Guidelines to the Special Boards of Adjustment,[1] which were developed by the carriers and the brotherhoods themselves (PX 20, p. 32).

For the purported purpose of safety Arkansas has fixed excessive minimum crew consists for railroads. It has further laid the entire burden of those requirements on Interstate Commerce by exemptions that are rationally unrelated to safety. Even if the minimum crews fixed were reasonable and valid, the classification by which interstate commerce alone bears the discriminatory burden necessarily results in the invalidity of the statutes. This Court has held that, even in the case of a generally permissible state regulation which has an incidentally discriminatory effect against interstate commerce, the state legislation is forbidden "if reasonable nondiscriminatory alternatives, adequate to conserve legitimate local interests, are available." *Dean Milk Co. v. City of Madison*, 340 U.S. 520, 529-30 (1959).

The pattern of coverage of these statutes are a classic example of the situation the Court was referring to when it said:

> "Provincial interests and local political power are at their maximum weight in bringing about acceptance of this type of legislation. With the forces behind it, this is the very kind of barrier the commerce

[1] These twenty criteria appear at pages 17-19 of the Award, PX 20.

clause was put in the fundamental law to guard against." *Nippert v. City of Richmond,* 327 U.S. 416, 434 (1946).

B. Equal Protection.

The absence of any relationship between the 50 and 100 mile exemptions and the purported statutory purpose of safety results in these statutes being invalid under the Equal Protection Clause as well as the Commerce Clause. The Equal Protection Clause requires that statutory classification bear a reasonable relation to the legislative objective and not be arbitrary. As this Court said in *Morey v. Doud,* 354 U.S. 457 (1957):

> "On the other hand, a statutory discrimination must be based on differences that are reasonably related to the purposes of the Act in which it is found."

This Court cited *Smith v. Cahoon,* 283 U.S. 553 (1931) where it struck down a state statute requiring motor carriers for hire to carry liability insurance because of an exemption in the Act for vehicles carrying specified products, saying:

> "This Court held that the exception violated the Equal Protection Clause since the statutory purpose of protecting the public could not reasonably support a discrimination between the carrying of exempt products like farm produce and of regulated products like groceries."
>
> "Such a classification is not based on anything having relation to the purpose for which it is made."

This Court also relied on *Hartford S. B. I. Ins. Co. v. Harrison,* 301 U.S. 459 (1937) holding invalid a state statute permitting mutual insurance companies to act through salaried resident employees, but exempting stock companies from the same privilege. The equal protection clause prohibited that statutory classification because the

"discrimination has no reasonable relation to" the different characteristics of the business involved.

This Court has reaffirmed this fundamental protection against discriminatory regulation as recently as *Rinaldi v. Yeager*, 384 U.S. 305 (1966) where, in the course of declaring invalid a state statute it found to discriminate between prisoners in confinement and persons convicted but not confined, it said:

> "The Equal Protection Clause requires more of a state law than non-discriminatory application within the class it establishes (citing case). It also imposes a requirement of some rationality in the nature of the class singled out. * * * But the Equal Protection Clause does require that, in defining a class subject to legislation, the distinctions that are drawn have 'some relevance to the purpose for which the classification is made'."

What was said of the lack of rationality of the 50 and 100 mile classifications as they pertain to the Commerce Clause is equally applicable here. Whatever there may have been in the proof in the earlier cases testing these laws that persuaded the courts that there was some basis for the Legislature to find that greater hazards were encountered in switching operations conducted by railroads with over 100 miles of line, and in freight train operations by those with over 50 miles, there is nothing whatever in this record to support that conclusion as applied to present day railroad operations. However, there is before the Court here a significant body of data that could not have been before the earlier courts. It is the findings of one after another impartial and expert Boards and Commissions as to minimum safe railroad manning requirements. Significantly, none of these panels adopted a criteria relating to the number of miles operated by a railroad as a relevant circumstance in fixing crew sizes.

Finally, it is most significant to note what is not in the record before this Court. There is no proof tending to support the 50 and 100 mile classifications as rationally related to the safety of railroad operations. In fact, a most enlightening body of proof on this point presented by appellees—that pertaining to the railroad operations in Arkansas that enjoy exemption from the statutes because of the classification—is wholly unrebutted. PX 47 through PX 74 shows the similarity of the operations of the 17 intrastate railroads to those of appellees, and that 15 of the 17 are able to conduct those operations with crews smaller than the statutory six men with no apparent sacrifice of safety considerations. The testimony of these witnesses presents a *prima facie* showing that their railroads have not had injuries due to the absence of additional crew members, and there is nothing in the record to impeach or rebut this testimony. Similar testimony concerning the operations of the six industrial rail facilities in Arkansas (none employing a larger crew than four men) is contained in PX 68 through PX 73, and PX 56 and PX 74 cover the two military rail facilities operated in Arkansas by the United States Government with three man crews.

Certainly if the mileage classification were rationally supportable, there should be something about the operations of these exempted railroads to which the appellants could point as distinguishing them from the railroads subject to the statutes.

It is interesting to note that in no instance have these exempted railroads made the length of their line a criteria for fixing crew sizes. Only two of the seventeen intrastate railroads use a six man crew, and they are among the shortest of these lines. Delta Valley & Southern Ry. Co. operates over 4 miles of track, and uses a six man crew which handles train operations and *also does the roadway*

maintenance (PX 60). El Dorado & Wesson Railway operates over 13.5 miles of track and uses a six man crew as a result of collective bargaining agreements with some of the intervenors although the General Manager testifies that he does not need six men and if the matter were left to management discretion he would use a smaller crew (PX 55). The other fifteen intrastate railroads use crews of less than six men. Exempted from regulation by these statutes, seven of these railroads have fixed crew sizes of less than six men by collective bargaining agreements *with the very labor organizations that are intervenors here* (PX 48, PX 49, PX 53, PX 54, PX 55 and PX 64).

Not only did the award of Arbitration Board No. 282 (PX 20) attach no significance to length of line operated in fixing the size of engine crews, but also the many Special Boards of Adjustment ignored this irrelevant factor in fixing the size of train crews (PX 21 and PX 80). All of these agencies repeatedly stated that the basic criteria guiding their actions was that of safety. However, none of these panels, the expertise of which is hardly subject to question, considered that the length of line operated was rationally related to safety and size of crews.

No one testified in this case that the length of line operated by a railroad had any rational relationship to the size crew required for safe operations. None of the persons knowledgeable about railroad operations whose determination of safe crew sizes are reflected in the evidence attributed any significance to this factor. The inevitable conclusion is that this legislative classification is not logically supportable as bearing any rational relationship to the purported purpose of the statutes.

To lay their burdens solely on interstate commerce, these statutes classify on the basis of size. As noted in *Morey v. Doud, supra,* "* * * where size is an index to the evil at which the law is directed, discriminations

between the large and the small are permissible." The obvious corollary is that if size is not a reasonable index such classification is impermissible. This Court made this clear in *Cotting v. Kansas City Stock Yards Co.*, 183 U.S. 79 (1901), when it concluded, in words equally applicable to the 50 and 100 mile classifications in the Arkansas statutes, that a Kansas law which applied to stock yards receiving an average minimum of 100 head of cattle per day violated the Equal Protection Clause, saying (pp. 111-12):

> "But while recognizing to the full extent the impossibility of an imposition of duties and obligations mathematically equal upon all, and also recognizing the right of classification of industries and occupations, we must nevertheless always remember that the equal protection of the laws is guaranteed, and that such equal protection is denied when upon one of two parties engaged in the same kind of business and under the same conditions burdens are cast which are not cast upon the other. There can be no pretense that a stock yard which receives 99 head of cattle per day a year is not doing precisely the same business as one receiving 101 head of cattle per day each year. It is the same business in all its essential elements, and the only difference is that one does more business than the other. But the receipt of an extra two head of cattle per day does not change the character of the business. If once the door is opened to the affirmance of the proposition that a State may regulate one who does much business, while not regulating another who does the same but less business, then all significance in the guarantee of the equal protection of the laws is lost. . . . If such legislation does not deny the equal protection of the laws, we are unable to perceive what legislation would."

In order for a classification to meet the requirements of the Equal Protection Clause, it must include or embrace all persons who naturally belong to a class. *Mutual Loan Co. v. Martell,* 222 U.S. 225 (1911). Arkansas has enacted no laws fixing the consist of crews on motor buses, taxicabs, airplanes, barges, cargo trucks, or any other segment of the transportation industry in this state. To single out the railroad industry in general, and the large interstate railroads in particular, for the imposition of punitive measures fixing arbitrary crew sizes while leaving all competing forms of transportation unfettered by such regulation seems to be just the type of discriminatory classification that the Equal Protection Clause was designed to prohibit.

The competitive disadvantage imposed by these statutes on appellees is obvious and substantial. The railroad industry is highly competitive within itself, and with other forms of transportation (A. 126). To maintain its competitive position, a railroad must make the necessary capital expenditures to operate its trains on schedule. Inability to adhere to the schedules results in a diversion of business to competitors. As Mr. Sheppard testified:

> "In most cases the carrier that provides the best and fastest service hauls their (the shippers) freight" (A. 126-7).

The impairment of the ability of appellees to make capital expenditures by requiring the economically wasteful expenditure of over $7,500,000 of their funds annually, while laying no like burden on competing forms of transportation, is patent discrimination.

Finally, the classification by which these statutes exempt intrastate railroads results in their invalidity under the Equal Protection Clause as well as the Commerce Clause. It is now well settled that the due process and equal protection clauses apply to corporations as

well as individuals, and in *Wheeling Steel Corp. v. Glander*, 337 U.S. 571 (1949), involving a state tax which fell on foreign but not domestic corporations, the Court said:

> "After a state has chosen to domesticate foreign corporations, the adopted corporations are entitled to equal protection with the state's own corporate progeny, at least to the extent that their property is entitled to an equally favorable *ad valorem* tax basis."

Each of the seventeen intrastate railroads exempted from these statutes, and the single interstate railroad so exempted, are Arkansas corporations (PX 47 through PX 64). The appellees are foreign corporations with respect to Arkansas.[1] It is obvious that the burden of these laws has been laid by the state only on foreign corporations, not its own corporate progeny.

CONCLUSION.

Appellees submit that the Judgment of the District Court should be affirmed.

Respectfully submitted,

MARTIN M. LUCENTE,
11 South La Salle Street,
Chicago, Illinois 60603,

ROBERT V. LIGHT,
1100 Boyle Building,
Little Rock, Arkansas 72201,
Attorneys for Appellees.

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[1] Par. 3 of Complaint. Admitted in Answers of defendants and intervenors.